Clinical Lectures
ON
DISEASES OF THE EYE.

Delivered at the Nottingham and Midland Eye Infirmary,

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LECTURE VII.

ON CERTAIN DEFECTS OF VISION WHICH ADMIT OF REMEDY BY SPECTACLES.

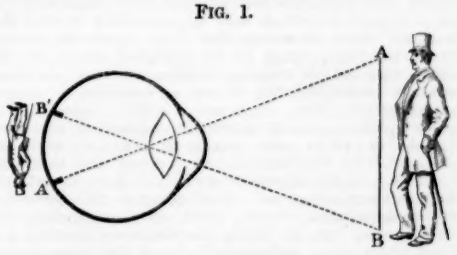
GENTLEMEN,—I have here the left eye of a recently slaughtered ox. I know that it is the left eye by the position of the optic nerve, which always lies below the horizontal line and to the inner or nasal side of the posterior pole. What is the "posterior pole"? Well, the "posterior pole" is a term borrowed from the language of geography, which serves to indicate the geometric centre of the back part of the globe of the eye, just as the centre of the cornea is the anterior pole. If I transfix this eyeball from before backwards with a harelip pin entered at the apex of the cornea, it emerges, as you see, at the posterior pole, which I may mention, *en passant*, is in close proximity to the yellow spot, the most sensitive part of the retina; while the track of the pin (the optic axis) is nearly, not quite, but nearly, coincident with a line (the axis of vision) drawn through the object to which the eye is directed to the fovea centralis retinæ, or yellow spot.[1] If I pass a thread round this eyeball transversely in the centre, an imaginary plane perpendicular to the axis, dividing the globe into two halves, that is the equator, and the segments respectively are the anterior and posterior hemispheres. Planes at right angles to the equator, vertical and horizontal, are called meridians; and the interspaces, for the purposes of description, are termed quadrants. Thus we say of the youth who has just come into the accident ward that he has been wounded by the impact of a piece of metal which has penetrated the lower and outer quadrant of the left eye—that is, a space bounded above by the horizontal and on the inner side by the vertical meridian. It is on the assumption that the eyeball is a sphere that it has been called the globe, and, in truth, in the human adult it is nearly a sphere, measuring almost, not quite, an inch in diameter, and weighing on an average a little over a drachm and a half. Slight variations in shape (normal astigmatism) are, however, universal, and I have known the eyeball so drawn out as to measure fully an inch and a quarter from pole to pole, and in another case so flattened as to present an antero-posterior diameter of only three-quarters of an inch.

I have here another eyeball—also, I perceive, a left one,—from which the sclerotic and choroid coats in the neighbourhood of the optic nerve have been removed, in order that you may see from behind the images of the objects to which the cornea is directed focussed upon the retina. The same phenomena may be observed without dissection if you can obtain the eye of an albino or of a white rabbit, in which the pigment of the choroid is absent and the sclerotic almost translucent, or, better still, on the focussing screen of the photographic artist who is about to take a picture. In all these cases you will observe that the image is inverted, and considerable ingenuity has been expended at various times in endeavours to explain how it is that we who go about with inverted images on our retinæ should see objects in the erect or real position. The most probable of these suggestions is that the cones of the retina, upper and lower, being directed respectively to a level above and below the eye, are able to accomplish a reversal of the image so far as the sensory impression on the brain is concerned. (Fig. 1.)

However that may be, it is clear that if the artist does not focus his subject accurately, if his lens is too far away from the screen or is too near, or if its outline is irregular, his picture will be imperfect; and it is exactly the same with the living eye. If it is too long (myopic), too short (hypermetropic), or if the cornea or lens presents an irregular surface so that the refraction differs in different meridians (astigmatic), not only do these conditions occasion well understood disturbances of vision, but they also give rise to certain objective physical phenomena which are elicited on examination, and which enable us to diagnose the defect from which the patient is suffering. For instance, if with the ordinary ophthalmoscope (a concave mirror of eight inches focus) you are able to see the optic disc at eight inches or thereabouts from the eye, you may rest assured that the eyeball is much too short (hypermetropic), or much too long (myopic). If it is too short, the image of the disc, which is a real or erect image, will remain in view while you approach quite close to the patient, and will move with you on slight inclination of the mirror; but if it is too long, the image, which is an inverted one, will disappear on approach, and will move in the opposite direction. On producing the inverted image in the ordinary way, by interposing a bi-convex lens—usually of two or two and a half inches focus—you will see a large disc and relatively small retinal field if the patient is hypermetropic, and a small disc and relatively large field if he is myopic; while, on slowly withdrawing the lens, the apparent size of the disc continues the same in emmetropia or normal sight, gets larger in myopia, and smaller in hypermetropia; in either of the latter cases in exact proportion to the degree of the defect.

Not only may you diagnose the exact condition with the ophthalmoscope, but it is easy also to prescribe the remedy without asking the patient a single question. In order to do this, we must inspect the optic disc and bloodvessels simply magnified by the patient's refractive media; and as

FIG. 1.



the lens and vitreous and aqueous humours collectively constitute a magnifying medium of short focus, it is necessary to get very close to the patient, using your left eye for his left eye, and your right for his right, bringing the patient's and surgeon's corneæ within an inch of each other. In this way, simply using the light reflected by the ophthalmoscope to illuminate the dark chamber of the eyeball, we obtain in the emmetropic or normal-sighted eye a good view of the optic disc and bloodvessels in their natural position, magnified about fifteen diameters by the patient's refractive media. If the picture should be blurred and indistinct, we know that the eye is either too short (hypermetropic), or too long (myopic), or irregular in shape (astigmatic). If too short, the image moves with the mirror on slight inclination of the observer's head; if too long, it moves in the opposite direction; if irregular in shape, you see the horizontal vessels well defined, while the vertical vessels are blurred and indistinct, or *vice versâ*. In short, the surgeon sees into the eye under exactly the same conditions that the patient sees out of it, and the glass (placed behind the ophthalmoscopic mirror), concave, convex, or cylindrical, which best enables the surgeon to see into the eye, is also the one which will best enable the patient to see out of it.[2]

Owing to the close approximation of the persons concerned, the actual contact of faces, necessitated by this the direct method of ophthalmoscopic examination, the surgeon is obliged to hold his breath or breathe over the patient, while the emanations from the latter are sometimes very objectionable. The inconvenience thus occasioned has led to the adoption by many surgeons of the oro-nasal veil, an

[1] The axis of vision and the axis of the globe form with one another an angle of about six degrees, which is usually increased in hypermetropia and diminished in myopia.

[2] It goes without saying that the surgeon must himself be normal sighted; if not, his ametropia must be corrected by spectacles while conducting the examination.

ingenious device invented by Mr. Ward Cousins of Southsea, as also to the very general substitution of another and more exact method, for which we are indebted to Dr. Cuignet, ex-professor of ophthalmology at Lille. You will, perhaps, best appreciate Cuignet's process if you will give a few minutes' study to this simple contrivance, which, like the camera of the photographic artist, may be taken fairly to represent the living eye. It is simply a convex lens (the refractive media) with a cardboard screen (the retina) fixed in a clip on a movable slide, so that they may be brought together or separated at pleasure. Now you will find, if you throw the light of a lamp upon the lens, that you will get an erect (because twice inverted) image of the flame clearly defined if the screen is accurately in the focus of the lens, and blurred and ill defined if it is out of focus. If it is out of focus from too close approximation of the lens and screen (hypermetropia), the image will move away from you on slight inclination of the mirror; if it is out of focus because the lens and screen are too far apart (myopia), it will *seem* to move with you; and if for the convex lens you substitute a cylinder, the motion will differ in opposite meridians (astigmatism). It is exactly the same with the living eye: if at a distance of three feet you throw the light of the ophthalmoscope upon the cornea and the image of the flame is perfect, you may conclude that the retina is in exact focus with the refractive media, and the patient emmetropic or normal sighted; if the image is imperfect, the eye is too long (myopic), or too short (hypermetropic), or the cornea or lens is irregular in outline (astigmatic). If the eye is too long, the image *seems* to move with you on slight inclination of the mirror; if normal, or too short, or if only very slightly myopic, it moves in the opposite direction; and if the cornea or lens is irregular in outline, the motion of the image differs in opposite meridians. In order to select glasses by this method, you must put spectacles upon your patient such as will approximately correct the defect, and then, throwing the light upon the cornea through the glass, judge by the perfected image, or its arrested, changed, or reversed motion, whether you have accurately neutralised the defect, or overdone or underdone correction. You may use a plane instead of a concave ophthalmoscopic mirror in conducting this examination, in which case you must stand at eight or twelve feet from the patient; but you will find that with the plane mirror the image moves with you in hypermetropia and against you in myopia. In alluding to this method, I have throughout, in order to avoid confusion, spoken only of the image; but, in truth, the shape and motion and blurred crescentic or well-defined edge of the dense shadow which surrounds the illuminated portion or image of the flame is more easily appreciated by the observer; hence Dr. Cuignet's method has been termed the shadow test or "skiaporescopy," from σκια (shadow), πορεις (march), and σκοπειν (to regard or look at). Briefly we call it "skiascopy"; it has also been described as "retinoscopy" or "pupilloscopy"; and originally, from the erroneous attribution to the cornea of phenomena due to the fundus oculi, "keratoscopy." You can readily understand how very useful these objective methods of examination must be with children, with very stupid people, or with those who are attempting to deceive, and you may test them in actual practice upon any of the patients we have seen to-night.

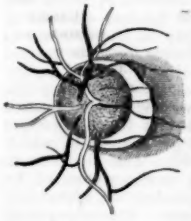
The boy, for instance, who is eleven years of age, and who has what our French friends would term a *nez retroussé* and a generally hollowed-out set of features, is an interesting example of a common form of hypermetropia, or short eye—an affection which we frequently find associated with this cast of countenance. The lad's mother insists that he is near-sighted, because, as she says, he holds his book so close to his face; and some of you were inclined to adopt this opinion when, on glancing at the eye with the ophthalmoscope, you caught a glimpse of the fundus at twelve inches. We found, however, that we could see the optic disc as well or better on approaching quite close to the patient, and that the image, which was improved by a convex glass behind the mirror, moved with us—phenomena fatal to the mother's theory. We found, also, that with the inverted image we got a large disc and small retinal field, and that on slowly withdrawing the object lens the nerve got smaller. Skiascopy, too, with an imperfect image revealed a blurred shadow that moved against us, while convex spectacles on the patient's face cleared up the image and reversed the shadow. The conclusions thus arrived at were confirmed by the subjective symptoms, for we ascertained that after reading for a time the patient's vision became indistinct, that he had been in the habit of wearing his grandmother's spectacles, and that distant vision was improved by convex glasses. Why, then, does this boy hold his book so close to his face? Definition would certainly be improved by an interval, and one would think, *a priori*, that a hypermetrope, like a presbyope, would prefer small objects at a moderate distance; and so he would; but in this case—as sometimes happens in hypermetropia—the patient has sacrificed definition for the sake of the large retinal images which he gets by the close approach of print to his eye. In these cases the eyeball is too short—a physical defect which, as you see, is made very apparent when the eyeballs are turned forcibly inwards,—and the patient is continually making efforts to lengthen it. This, or its equivalent, he accomplishes by forcing the lens into a more convex form by the active exercise of the ciliary muscle. After a time this muscle gets tired, gives in, and small objects, such as print and stitches, fade from view. By placing a convex lens in front of the eye we practically lengthen it, thus obviating the necessity for this excessive accommodative effort, and the *strongest* glass with which the patient can see type an inch long at fifteen or twenty feet is the glass to prescribe. This will neutralise the whole of what is called the manifest hypermetropia, and after a time, which may be measured by months and even years, as the accustomed effort ceases and the spasm of the ciliary muscle gives way more and more, stronger and stronger glasses may be ordered, until the whole of the defect (the remaining latent hypermetropia) is neutralised. Now suppose (for it sometimes happens) that your hypermetropic patient's distant vision is embarrassed and not improved by convex lenses; nay more, suppose (for it also sometimes happens) that his distant vision is improved by concave glasses, should we infer from this that a patient with short eyeballs was near-sighted? By no means. Our course under such circumstances would be plain: we should paralyse the ciliary muscle by the frequent instillation of a 2 per cent. solution of atropine, and then test again, taking special care to order the patient to commence wearing the prescribed glasses before the effect of the atropine had quite passed away. In any case, the use of atropine will reveal the whole of the latent hypermetropia, and enable us to name the glass that will ultimately be required. Why not, then, use atropine for every case, and order such glasses as give complete correction at once? Simply because they would at first be too strong, and would only embarrass the patient, who is unable at once to relax a long-accustomed strain. In the case before us, No. 18 bi-convex is the strongest glass with which the patient can see distant objects: we shall therefore order spectacles of that strength for general use (allowing a little stronger for reading if necessary), and change them for stronger ones as soon as the symptoms return. I have already, in my remarks on Strabismus, pointed out how it is that hypermetropia causes internal squint, and therefore need not say any more on this the most common form of ametropia.[3]

The girl, who is twelve years of age, and who you noticed pinched her lids together when asked to read large type at twenty feet, clearly has eyes that are too long, for we found on ophthalmoscopic examination that the optic disc, which was plainly visible with the mirror alone at eight inches or thereabouts, vanished on approach to the eye, while on getting quite close, the image, which reappeared blurred, and which moved against us, was cleared up on placing

[3] When rays of light from distant objects which are parallel pass through a convex lens they are made to converge, and the distance of the point at which they are brought together—that is, to a focus—from the lens is the measure of the lens. Concave glasses cause the rays of light to diverge, and the focus of the concave glass is ascertained by the number of the convex glass which is required to neutralise it, the two combined producing the effect of a piece of plane glass. A convex glass in front of a short eyeball converges the rays a little before entering the eye, so that they are brought to a focus sooner; a concave glass in front of a long eyeball causes the rays to diverge before striking the eye, so that they are brought to a focus later—in both cases, if the glasses are properly selected—on the retina. As this lecture was delivered to general practitioners, I used the terms inches and feet in preference to dioptrics and metres, which would not have been so well understood. The unit of the metrical system is called a dioptric, and is equivalent to the old lens of forty inches focus, so that in order to change the inch system into the metrical system it is only necessary to multiply by forty; thus, for instance, if we wish to ascertain the equivalent of a lens, say, of seven inches focus in dioptrics, we multiply one-seventh by forty—$\frac{1}{7} \times 40 = \frac{40}{7} = 5{\cdot}5$ in dioptrics; to reduce the dioptric number to the inch system we must divide by forty—thus, four dioptrics, 4 D = $\frac{4}{40}$ = $\frac{1}{10}$ in inches.

a concave glass behind the mirror. Tested further, we found that with the inverted image produced in the usual way we got a small disc and a large retinal field, and that on slowly withdrawing the object lens the small disc got larger. Skiascopy, too, revealed an imperfect reflection of the flame of the lamp, and a blurred shadow which seemed to move with us; while concave glasses on the patient's face brightened the reflection and reversed the shadow. The diagnosis thus arrived at was confirmed by the subjective symptoms, for the girl's father informs us that "she pores very close over her books"; that she reads by twilight and firelight; that she cannot discern the figures on the black board at school; and we have ascertained that in order to see type an inch long at twenty feet she requires concave glasses of fifteen inches focus. In these cases the eyeball is too long; originally of normal contour, it is gradually compressed into an ovoid form by the action of the internal recti muscles in the too frequent and too persistent effort at convergence necessary for binocular vision of near objects. A moment's examination of this model will enable you to appreciate the fact that such pressure will be most felt upon the posterior segment of the eyeball, where it is least supported, and here the globe bulges. This bulging, of course, lengthens the eye; and the longer it gets, the nearer must small objects be approached in order to see, and the more must it be turned inwards, and the more it is turned inwards the longer does it become. Not only does the eye bulge, but the weakest part—which is situated just outside the optic disc—in the great majority of cases gives way, and here the stretched choroid, no longer supported, becomes absorbed, and the sclerotic, no longer concealed, appears as a white patch—the well-known myopic crescent. (Fig. 2.)

FIG. 2.



Young and plastic and also lax and ill-nourished tissue is, of course, more likely to yield than sterner stuff and more mature fibre, and patients of weak constitution are more prone to suffer than others; hence from five to fifteen is the most dangerous age, and delicate children and those who have recently recovered from an illness are most frequently affected.[4] Such patients, owing to their habit of nipping the lids together in order to exclude circles of diffusion, are called "myopes," from the Greek word *μύω* (to shut), and are in large proportion simply the victims of our modern system of high-pressure education, for the eyes, which are used for hours daily on small and near objects, in many cases, as we have seen, lose their normal shape and become unable to distinguish large and distant ones. The faculty which is cultivated in the growing child naturally waxes, while that which is neglected wanes; the myope can see fine print more clearly and in a dimmer light—firelight, twilight, moonlight—than an individual with normal eyes, but his horizon becomes very limited. The landscape, the seascape, the pleasant country scenery, the actors on the boards, the familiar faces, all fade, and but for the use of glasses which would blind an ordinary individual would be shut out for ever. Some of these patients get worse steadily (progressive myopia); in others the disease advances by fits and starts until puberty and sometimes afterwards (periodically progressive); and in others it is stationary, or advances very slowly, or even improves slightly with age.[5] Progressive cases, which in both forms are serious, must be met by appropriate treatment, such as paralysis of the accommodation by atropine, blue glasses, leeches to the temple (preferably the artificial leech), followed by a period of darkness from time to time, with tonics, aperients, and mild mercurials. All such patients when studying or working—if they must work or study—should do so in a good light coming from the back, if possible over the left shoulder, and should never read when lying down, leaning forward, or travelling in a railway or other carriage.

With regard to glasses, we have seen that the cause of all the trouble is the excessive convergence necessitated by the too great devotion of such patients to near objects; and if they must continue their pursuits, even in a modified form, it is absolutely necessary that we should give them glasses that will enable them to hold print at twelve or fourteen inches from the eye, not that they may see better, be it thoroughly understood, but that they may see further off. To display the beauties of nature, to prevent moody introspection and isolation from their fellows, to enable such patients to recognise faces across the street, is no doubt of much importance, as contributing to their enjoyment of life, as well as in an educational sense; but it is altogether a secondary consideration compared to the necessity of preventing undue convergence, by giving the patient glasses that will enable him to hold his book a good distance from his face. The great danger in either case is that we shall order glasses which are too strong. Such patients can hardly avoid exerting their accommodation, and the effort enables them to see better with a glass which is too strong than with one which is exactly suited to the requirements of the case; and just as in hypermetropia we are apt to prescribe glasses which are too weak, so in myopia we run a risk of ordering them too strong; and just as atropine in hypermetropia reveals the whole of the defect, so will it in myopia enable us to get rid of this most embarrassing complication. In the case before us I shall suggest rest for some weeks, paralyse the accommodation, and keep out excess of light with blue spectacles; afterwards, as there is as yet no myopic crescent, I hope to arrest the progress of the disease by weak glasses which may be worn constantly both for near and distant objects, thus enlarging the patient's horizon, and enabling her to hold print fourteen inches from the face.[6] Should she, in spite of glasses, insist on approaching print too close—and myopes, especially those whose visual acuity is below par, will sometimes, like the hypermetropic boy, do so for the sake of large retinal images,—we must withhold glasses, for it is better that myopes should dispense with spectacles for near work, than that they should wear them and still exert their accommodation, and still converge, and still approach small objects too close to the eye.

Of course in all these cases, the common sense and best plan of treatment would be to remove the cause, to interdict reading and fine work for all threatened individuals; and if we could do this, if we could fulfil this plainest of indications, all would doubtless be well; but, unfortunately, we are not consulted until the mischief is done. Moreover, it is seldom that such suggestions can be carried out, for the masses are coerced by the State, and the classes are competitively examined for all sorts of services, until, in some cases, their eyesight is so damaged by study that they cannot pass the visual tests required for the office for which they have striven. Short sight—unknown among savage tribes and tillers of the soil—makes its appearance first among the children at village schools, in the proportion of about 1 per cent.; in schools of higher grade, 20 per cent.; higher still, 40 per cent.; and Erismann has calculated that if the disease continues to increase in the same ratio that it has done for the last fifty years, in a few generations the whole population will have become myopic. The mere cram—for it is not education in any true sense—is of course soon forgotten, fades like the shadow on a wall; but the damaged eyesight and impaired physique remain and are transmitted, sad evidence of the folly of a great people, "who, wishing to improve, choose the worst," and for the sake of mere useless book learning are content to sacrifice the most precious of senses.

(To be concluded.)

[4] It is the convergence which is necessary for the fusion of images upon the retinæ which is the cause of all the mischief. When one eye only is used, as in the case of watchmakers, who pore over minute objects for hours daily, it is very seldom indeed that any ill result is noticed.

[5] The myope, who pinches his lids together in order to diminish the sight hole, of course sees better through a small aperture than a large one, and this improvement with age is entirely due to the gradual contraction of the pupil which goes hand in hand with advancing years. When a short-sighted person says, "I am not so short-sighted as I used to be," he usually means, however, that he is beginning to suffer from aged vision, and cannot see objects so near to his eyes as formerly. He does not mean that he can see print further off; but that he cannot see it so near. Such patients often require convex glasses for reading, and concave for distance. Persons with high degrees of myopia are able to read without glasses up to great age; hence short sight is commonly supposed to be strong sight; it is, nevertheless, weak sight, for such patients cannot see at a distance, and they are apt to lose the sight altogether from gradual extension of the myopic crescent, consequent increase of the blind spot, and ultimate detachment of the retina.

[6] Each case must be treated on its own merits; but when the patient can see at a distance with concave glasses of twelve inches focus and more, such glasses may usually be worn constantly for all purposes; when the patient requires stronger glasses than these to see at a distance, he must have glasses three or four numbers weaker for reading.

CASES OF

GENERAL PARALYSIS OF THE INSANE IN HOSPITAL PRACTICE.

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NOT so long ago general paralysis was considered to be of interest only to the alienist, and even now to the majority of medical men the term conveys no definite idea of a special disease. The following cases are of interest for the remarkable absence or mildness of the mental symptoms, and the consequent difficulty and uncertainty of the diagnosis; and in one instance (Case 1) for the unusual mode of onset, apparently after myelitis. None of these cases had been in an asylum when I first saw them. I am becoming more and more convinced that a considerable number of cases indistinguishable from general paralysis except by the mildness of the mental symptoms, which tend gradually towards dementia, but without exaltation and without active delusions, run their course to a fatal termination without finding their way to the asylums, even in the case of the poorer members of the community. The difficulty of keeping under observation in a large town patients who leave the hospital, and are changing their abode every few months, will sufficiently explain the absence of post-mortem evidence of the correctness of the diagnosis.

CASE 1. *General paralysis following myelitis.*—J. P——, aged thirty-seven, a very powerfully built labourer, weighing about 15st., was admitted under my care into the Nottingham General Hospital in February, 1887, complaining of loss of power in the lower extremities. He had been married fifteen years, and was a steady, industrious man, having worked eleven years in one place. There was no evidence of syphilis. Two years previously he was taken ill with a shivering fit while at work. On reaching home and lying down he noticed his legs jumped and twitched a great deal. He had no headache. Next day the legs were a little worse, and the arms began to twitch, but he could manage to walk. On the fifth day he lost all power in the arms and legs, and he could not turn in bed or feed himself. The speech was somewhat thick. The sphincters were not affected. In about a week he began to improve, and in four or five months returned to work, and continued to do the very heavy work of a labourer at some ironworks for a year and a quarter. Three months before his admission to the hospital he again began to experience difficulty in walking, loss of power in the arms and legs, and thickness of speech. He became emotional, subject to fits of depression, and occasionally burst out crying without apparent cause. But at the time of his admission, and for a fortnight afterwards, he showed no delusions, nor could I get a history of any from his wife. His temperature was normal, and his appetite variable; some days he would not eat any dinner. He was allowed to be up in the afternoon, and could walk about the ward and corridor slowly, but not get up or down stairs. He walked slowly and stiffly, with short tottering steps. The toes only just cleared the ground. There was some resistance on passive movement of the legs, due to muscular contraction from hypertonicity, but the contraction was only momentary. There was some loss of power. In the upper extremity the grasp registered with the dynamometer 80lb. with the right hand and 55lb. with the left—a weak grasp for a powerfully built labourer. There was no muscular atrophy. The plantar reflex was somewhat exaggerated on both sides; the cremasteric very slightly; epigastric and abdominal well marked on sufficient irritation. Knee jerk much exaggerated on both sides; the Achilles tendon reflex could also be easily obtained. A blow on the front of the lower part of the leg started the knee jerk almost as well as a blow on the ligamentum patellæ. The muscular hypertonicity was so marked that a blow on any of the muscles made them contract. There was very perfect ankle clonus, which could be kept up for a minute or more, and the rate was fairly constant at 6 per second. The deep reflexes in the arms were quite as exaggerated as in the legs. There was no loss of muscular sense so far as could be ascertained, and no incoördination. He slept well, and was not subject to headache. The sensation to touch was normal, as were also those for pain and heat. The back was examined with a hot sponge, and no painful spot could be found. The pupils were equal and somewhat contracted. They responded to light and to accommodation, but sluggishly. There was no albumen in the urine. About a fortnight after his admission he began to sleep badly, and became restless and more emotional. He wandered away to the women's wards, and when brought back became very unmanageable, refusing to do what the nurses told him. He used to go to the lavatory and turn on all the taps. He had several delusions about money, thinking that he had had large sums left him. He quarrelled with the other patients, and threatened to murder those who restrained him. Whenever I saw him, he was quiet, promised to do as he was told, and exhibited no delusions. On March 18th he was noisy all night, and very excited, and required two attendants to sit by his bed all night to prevent him getting up. He expressed a wish to get the iron rod at the top of the bed loose, so that he might murder those restraining him. The diagnosis was general paralysis of the insane, in which sclerosis of the cord, following myelitis, was the earliest manifestation. He was removed to the Nottingham Borough Asylum, and Dr. Powell tells me he has no doubt he was suffering from general paralysis of the insane. By April 2nd, 1887, he was unable to walk without assistance, and occasionally exhibited delusions and hallucinations, but they soon disappeared. Shortly afterwards, he was removed to the Derby County Asylum, where he died in June 1888. Dr. Lindsay informs me that it was an undoubted case of general paralysis. To Dr. Lindsay and Dr. Richard Legge I am indebted for some microscopic sections of the brain, medulla, and spinal cord. There was marked sclerosis in the cord, affecting chiefly the periphery, as if secondary to meningitis, and only extending deeply in the lateral columns, and chiefly in, though not strictly limited to, the crossed pyramidal tracts. There was no sclerosis of the posterior columns. Everywhere the nervous tissue seemed to be in a low state of nutrition. Many of the nerve fibres were degenerating, as were also the ganglion cells, which had in large part lost their processes. The bloodvessels were very large and full, and they were surrounded by unusually large spaces (? dilated lymph sheaths), apparently due to the shrinking of the nerve tissue. This appearance was very striking. The walls of the vessels were much thickened. In many places the nerve fibres had disappeared, and their places were occupied by granular matter. In the brain and medulla the changes were somewhat similar, and in the cortical layer of the brain were numerous areas of cellular infiltration. The condition of the limbs while the patient was in the hospital was abundantly explained by the annular and lateral spinal sclerosis.

CASE 2. *General paralysis; abundant physical signs; no delusions; memory good.*—J. R——, aged thirty-one, a waiter, was admitted into the Nottingham General Hospital under my care in April, 1887, complaining of general loss of power and mental depression. He was a well-developed, well-nourished man. He had been married several years, and had a healthy family. There was no evidence of syphilis, and he stated that he did not take alcohol to excess. His illness began about a year previously, when he was camping out with the Volunteers for eight days, during which it rained nearly every day. Before this time he had been quite well, and ever since he had been more or less ill. He got a severe catarrh at the time and had a cough all the following winter. Six months before admission he had a stroke and lost power in the arm and leg on the left side. He regained use in them on the following day, but ever since that side had been weak, and the arm and leg trembled if he overtaxed them. A few months afterwards he had some kind of fit, fell down, did not lose consciousness, but could not see; everything seemed dark. Since then he had had several of these attacks, and suffered more or less constantly from headache, giddiness, and tremors in the limbs. There was nothing peculiar in his gait, and he could stand with his eyes shut. There was no symptom of incoördination. The knee jerk was present on both sides, but was somewhat exaggerated on the left. The pupils were equal, but somewhat contracted; they responded to light and accommodation; the discs were normal. The common sensibility was unaltered. The patient varied very much from day to day, and sometimes seemed nearly well. He complained of his sight failing. He was sent for a few weeks to a convalescent home, and was readmitted in July, 1887. During the

interval, on several occasions his legs had suddenly failed him and he had fallen down. His speech, which before was rather thick, was now much worse. His tongue and lips trembled a good deal. The pupils were still equal, but contracted to the size of a No. 2 catheter, and scarcely reacted at all to light or accommodation. The expression of the face was now very blank. There was exaggerated plantar reflex and some ankle clonus. He slept badly, was very irritable, and was often low-spirited. He had no delusions at all. He did not complain of headache. A year later I found him much more feeble, and unable to walk without support. He spoke with much difficulty, pausing between each word. There was much tremor of the lips, and the tongue could only be put out slightly by jerks. The pupils remained equal and contracted. The memory was fairly good. There were no delusions, but otherwise it seemed a typical example of general paralysis.[1]

CASE 3. *General paralysis in a woman, resembling disseminated sclerosis.*—H. D——, aged thirty-two, single, a machinist, was admitted on Sept. 16th, 1885, complaining of numbness of the arms, trembling of the whole body, and difficulty in articulation. Her illness began about eight months before. Previously to that she had been stout and strong. She had led rather a loose life, but there was no direct evidence of syphilis. She was very thin, and had been under-fed for a long time. She was very dark, and had black hair cut like a man's, but worn rather long. Her general aspect was extremely "wild," and she looked frightened. She was very fidgety, but not distinctly choreic. She could put out her tongue, but not keep it still; it was very tremulous. The facial muscles were very tremulous, especially those that moved the lips. She had great difficulty in articulation, and it was difficult to understand what she said. She slept well. The arms when held out were tremulous, but she could grasp any small objects like a pin firmly and accurately. The superficial plantar reflex was much exaggerated. The knee jerk was quite absent on both sides. There was no distinct ankle clonus, but marked muscular hypertonicity. The legs were constantly trembling, both when she was sitting and lying, as in a person shivering with cold. No alteration of sensation could be detected. The temperature was normal; urine copious, pale, and free from albumen; no local wasting of muscles. Menstruation had been regular till four months previously; since then amenorrhœa had supervened. There was no suspicion of pregnancy. Six weeks later she had improved in some respects. The trembling of the legs had ceased, and she was able to walk, but the gait was ataxic. She could not hold a pen, though she could grasp it in the middle like a stick. There was no evident impairment of the muscular sense, though this and other investigations were rendered difficult by her low degree of intelligence. Shortly afterwards she became quarrelsome, and used to strike the other patients. Her mental faculties, too, became more impaired. She got up in the middle of the night, and told the patients near her she was dead. Three months later she was in much the same condition, but her mental symptoms were less prominent. She, however, insisted that the pictures on the walls were constantly moving. I asked Mr. Evan Powell, the superintendent of the Borough Asylum, to see her with me, and he agreed that it would probably turn out to be a case of general paralysis. She went to the workhouse, where she died in about a year. I did not hear of her death till afterwards, and no post-mortem examination was made. The resemblance to disseminated sclerosis was very close, but the absence of the knee jerks and of muscular spasm at any stage, and the extensive affection of the face and tongue, together with the mental symptoms, render it much more probable that it was general paralysis of the insane.

CASE 4. *General paralysis following an injury to the head.*—G. G——, aged thirty-three, a coal miner, was admitted on March 31st, 1888, complaining of irregular pains. An elder sister is "queer in her head." Till two years previously the patient drank very heavily. A month before his admission some coal fell on his head and rendered him unconscious for a short time. Since the accident he had complained of pains in his head and a feeling of chilliness all over the body. He is said to have been "queer in his talk," to have been very restless, and frequently to have shouted all night. When he was about to come into the hospital he wanted his wife to buy everything new for him. He was a well-developed, muscular man, and no trace of injury to the head could be detected. The pupils were unequal. His articulation was very thick and slurred, and his speech slow. There was very marked twitching and tremulousness of the zygomatic muscles and of the tongue. His general intelligence was certainly defective. The knee jerks and the plantar reflexes were much exaggerated. He walked fairly, and could stand with the eyes closed. He was treated with bromides. He soon lost the pains in the head, and improved somewhat in general condition. His temperature was always normal, and there was no indication of meningitis, unless of a chronic form. He complained incessantly of the food, which was good, saying it was not fit for a dog. He also complained to his wife that his clothes (which were almost new) were not worth three halfpence. The sister of the ward said that he was very odd, and sometimes childish in his behaviour. One night he dragged his bedstead into the middle of the ward without any reason. He also used to run about the garden like a little boy. One day he showed, with great glee, a small penknife his mother had given him, and enlarged greatly on the value of it, and on the fact that it was real tortoiseshell. He very soon afterwards left the hospital. The diagnosis was that it would probably turn out to be general paralysis in the early stage. About three weeks later, his wife stated that her husband had been very violent, and had assaulted her and threatened her life with a poker. She applied to the police, and he was brought before the magistrates and convicted. This case hardly comes within the same category as the rest. The onset was rapid, and he will probably very soon require removal to an asylum. He has one fixed delusion, but no grandiose ideas. The marked mental symptom is partial dementia; the physical changes are very marked.[2]

CASE 5. *General paralysis associated with alcoholism and resembling pseudo-tabes.*—J. S. B——, aged forty-eight, commercial traveller, was admitted into the General Hospital, under my care, on Aug. 1st, 1888, complaining of a general feeling of illness, pains in the legs, and loss of memory. He says the last few days are a complete blank. He knows where he is, but not how he came here. He makes most contradictory statements. He is a tall, muscular, stout, finely developed man; but his facial expression is rather blank. There is no marked trembling of the face, lips, or tongue. His speech is rather thick, but he can say such words as "British constitution." His grandfather died of "paralysis," and one of his children had infantile paralysis; but there is no history of mental or nervous affections. He has had much business worry and anxiety lately, and has been accustomed to drink a great deal. The pulse is 92, very small, and weak; and the heart's action excessively feeble. He sleeps very little. The pupils are equal, rather contracted, but react to light and accommodation. The plantar reflex is exaggerated, but the knee jerk is completely absent in both legs. He can stand with the eyes closed; his gait is unsteady and somewhat ataxic. Sensation, as tested with a feather, was found to be impaired in both legs up to the middle of the thigh; localisation was especially deficient. Sensibility to pain was very much diminished, but to heat scarcely at all. In the arms, sensibility to heat and contact good, to pain diminished. A week later the mental condition had not improved. He did not know whether he had been in the hospital a week or a month, and was not sure of the day of the week. He sleeps better, but is always depressed. Subsequently he had a delusion that the matron had ordered him out of the hospital, and persisted in this delusion for several weeks. He became despondent, and frequently wept. He is also under the delusion that his bowels are never moved. About ten days after his admission he began to have epileptiform, or rather apoplectiform, seizures—probably the so-called "congestive attacks." He became unconscious for about one or two minutes, had marked dyspnœa and inversion of the eyeballs, but no convulsions, biting of the tongue, or foaming at the mouth. He had one or two of these attacks daily for two or three weeks. He is still under

[1] Case 2 has now (Dec. 4th) been in an asylum a month; he was unable to stand on his admission, and has bedsores; he has now no persistent delusions; no grandiose or exalted ideas, but much loss of memory and dementia. He had occasional attacks of violence and excitement very shortly before his admission.

[2] Since writing the above I have ascertained that G. G—— (Case 4) has just been admitted (July 20th, 1888) into the Nottingham Borough Asylum, with well-marked general paralysis and most abundant grandiose ideas.

treatment, but I have no doubt that he will prove to be a general paralytic.[3]

The foregoing five cases, together with one of locomotor ataxia of old standing, terminating in general paralysis, published separately, form a group of much interest and importance. The scantiness of the pathological evidence detracts greatly from their value, but under the circumstances it was unavoidable. I have not ventured on a diagnosis from the clinical aspect alone without being fairly familiar with general paralysis as seen in the asylums. Case 1 is of special interest as an example of general paralysis commencing in, or following upon, an affection of the cord. And in Case 4 the influence of a cerebral injury in a man of alcoholic type, and with a neurotic or insane family history, is worthy of comment.

Nottingham.

ON AN

INEXPENSIVE AND EFFICIENT SUPPORT FOR THE HEAD IN CARIES OF THE CERVICAL SPINE.

By RICHARD BARWELL, F.R.C.S.,
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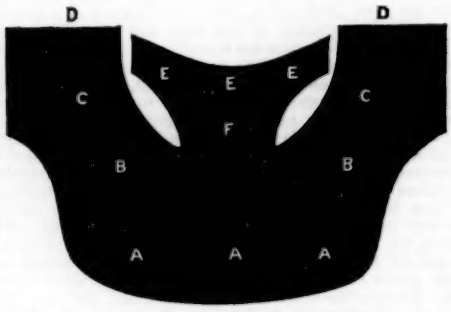
IT must have frequently happened to other consulting surgeons, as it has to me, that a child is brought to them suffering from caries of the cervical vertebræ, whether of atlas and axis or of lower bones. Often the parents of such patients cannot afford the usual *minerve* or jury-mast; or in pretty severe cases it may be advisable to prevent rotation, which those mechanisms cannot effect. Occasionally, too, the condition of the neck is such as to render it necessary, or at least highly desirable, to adapt a support that can be very quickly—indeed, immediately—applied. So it occurred in my practice about twelve years ago that a child was sent to me by Dr. Tucker. It is only right that I should say the parents did not bring the child for several days, because that gentleman would not have allowed a patient in such condition to go about with the head unsupported. The girl was not only suffering from pain, but also from that undefined dread which caused her to hold her head with her hands, to fear and avoid any approach, and to wear a peculiarly anxious, watchful expression when anyone moved quickly in her immediate neighbourhood. I was strongly impressed with the danger of letting this child leave my house lest she might fall dead in the street, unless the head were supported. I therefore adopted the following mode of splinting the neck. It is one which I have often used since, and have found very advantageous, even in less acute disease, and for continuous use.

FIG. 1.



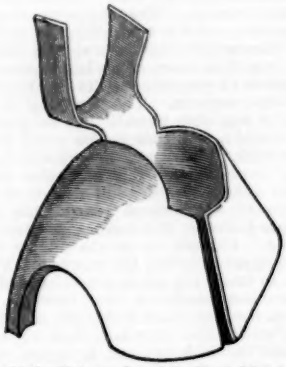
Form of brown paper pattern, approximately given. A A A, Part that lies on the chest, the edge being a little above the line of the nipples. B B, Part that lies on the shoulders. C C, Part that lies on the scapulæ. D D, Edges that nearly meet, one on each side of the spine. E E E, Part that lies under the chin, and on the rami of the jaw. F, Part that lies in front of the neck.

A pattern must first be cut in brown paper, or some such material, thus: Let us suppose the child to be about seven years old. A piece of paper, say eighteen inches by twelve, is laid, with the long axis transverse, on the neck and upper part of the chest, in such wise that when it is pressed in against the throat and under the jaw its upper anterior edge projects rather more than an inch beyond the chin. With scissors the paper is cut in a concave line from the condyle of the jaw downwards along its ramus, by the side of the throat, well outside the thyroid cartilage, to a point just above the clavicle, and about a third of its length outside its joint with the sternum. These cuts, being completed on each side, permit the flaps of paper that lie outside them to be folded back over the shoulders and scapulæ in such wise that they meet on the spine between those bones. The rest is mere shaping. The part that protrudes beyond the chin and jaw can be cut away to a level with those parts. The edges of the shoulder-flap, if they press on the root of the neck, must be pared sufficiently to allow room for that part. The lappets, which on each side project beyond the shoulders, can be cut away, leaving a concave edge with the centre of the curve upon the acromion. If there be any overlapping at the spine between the scapulæ, the redundancy can be pared off so that the two edges are parallel, and almost, but not quite, in contact. The pattern then assumes the shape seen in Fig. 1.

To this pattern is cut a piece of poroplastic felt, which, when softened by heat (steaming is the best), is moulded on the patient, partly by hand pressure, partly with bandage. When thus far complete the splint is of the form given in Fig. 2.

The child can wear it at once outside the shirt or chemise, and with no other precaution than placing a piece of wadding between it and the face. It will be quite a sufficient support to obviate the dangers I have mentioned, and, indeed, several of my poorer patients have used it without further addition for several months. Nevertheless, I advise that an instrument maker or bandagist be employed to arrange it thus. The chin plate should be lined with wash-leather, and may advantageously be somewhat padded; to each upper end of the fork two straps are to be sewn, the one to pass round the nape,[1] the other over the vertex; if this latter strap slip forward, the two can be tied together with a tape running in the line of the sagittal suture. Lastly, the felt should be perforated along the edges, which lie by the line of the spinous process, so that the whole appliance may be laced on.

FIG. 2.



Moulded splint seen from left side and front.

In rather exceptional cases, the head, instead of falling forwards, has a backward inclination; such may be met by reversing the mode of cutting the pattern—that is to say, by placing the paper on the back, forming an occipital instead of a maxillary plate, and letting the edges meet and be laced over the sternum; or, if it be desirable to support the head in both directions, this can be done with very little more trouble by shaping a portion in form somewhat like a reversed L (⅂) at each corner, from whence in

[3] Case 5 has now been in the asylum about six weeks; his memory is no better, he has no grandiose ideas and no delusions, and no more "apoplectic" attacks, but is more feeble.

[1] This in most cases will have to be attached a little below the top of the fork, so as to escape the ear.

the pattern the jaw-plate is cut out—that is, at the inner angles of the line marked D in Fig. 1.

As I have successfully treated many cases of cervical spondylitis with this splint, it seems to me desirable to let so inexpensive and simple a contrivance be more widely known.

Wimpole-street, W.

ON THE PRECEDENT CAUSE OF RICKETS.

BY ROBERT J. LEE, M.A., M.D. CAMB., F.R.C.P.

IN the seventeenth chapter of Dr. Glisson's treatise on Rickets[1] he discusses the question of those "precedent diseases which may be the cause of this disease..... because they leave it behind them as one of their effects." Consistently with his theory of the primary essence of rickets, Glisson admitted into his catalogue of precedent causes almost every form of disease; though it is evident that he did so, in the case of several of them, rather for theoretical than for clinical reasons. The explanation given by Glisson for the prevalence of rickets in his own time contrasts curiously with the ideas of the present day. Wealth, luxury, and idleness were, in his opinion, chiefly responsible for the malady; while we are inclined to attribute it to influences of an opposite character—to want of proper food, want of pure air, and generally to insanitary conditions more or less unpreventable in large and crowded cities. From his list of precedent causes Glisson excludes those diseases or tendencies which are transmitted from parents to their offspring—notably scrofula, tuberculosis, and syphilis. On these points his views accord with those in general acceptance at the present time. He also excludes the possible effects of peculiarities of climate and locality, and devotes separate and particular attention to them. Without denying possible influences in the causation of rickets to each of these two classes of morbid agents, we may fairly ask the question whether in every case of rickets it is possible to discover a precedent cause, which, as it were, intervenes between remote conditions and the distinct evolution of the rickety signs and symptoms. This is the question which I propose to consider. It is almost unnecessary to state that the answers to it depend entirely on clinical observation, and we must not be surprised if there are considerable differences in them.

After a careful consideration of Glisson's views on this point, I am inclined to think that if the question had been put to him, "Have you ever seen rickets develop without a precedent cause?" he would have replied that he had rarely seen such an occurrence. Possibly he might have have gone so far as to say that in every case there was a precedent cause, though it might be difficult to discover it. He would certainly have denied that such influences as parental tendencies or peculiarities of locality or climate could of themselves produce the disease. Such, at least, is the conclusion one would arrive at from the arguments and statements contained in his treatise. To those who would agree with Glisson that it is generally true that rickets are the consequence of some distinct form of illness, it would be reasonable to put the question, "Is there, then, any particular form of disease which is, more frequently than others, a precedent cause?"—and this question would be the more proper as it bears directly on the subject of treatment.

Now the reason why it is difficult for us to determine this question of precedent cause is because we are not required professionally to advise in cases of rickets until the symptoms are fairly well developed. We have, then, only present conditions and the reports of parents or nurses to guide us to any conjectures we may form of the disturbing influences which have possibly been more or less active in the causation of the rickety condition. It is in such cases difficult, if not impossible, to discern clearly between causes and effects, and this the more so because the reports given of the past histories of the cases are often misleading, and we may be induced to think little of what may really have been of great importance. So far as information is afforded by the statistical method of inquiry, I think it will be found that the precedent cause which most constantly recurs in the histories of cases of rickets is some form of pulmonary disturbance, generally indicated by the term "bronchitis," or in common language by terms suggesting a difficulty of respiration, such as "cough," "hard breathing," or such-like. And consistently with such reports we generally find that present clinical symptoms are chiefly those of some form of pulmonary disorder, indicated by râles, rhonchi, crepitation, or some other sign of morbid condition; and this, too, of such a character as to lead to the inference that it has existed for some length of time, and may therefore be fairly regarded as having played a more or less important part as a causative agent.

But the cases of most value to this inquiry are those where the children have been under observation during the period of the evolution of the rickets, and it is from the study of such cases that I have been led to think that rickets is a disease which is due principally, if not entirely, to any cause which interferes with the functions of respiration, and that the precedent cause of rickets is generally some form of pulmonary inflammation, such as bronchitis, broncho-pneumonia, or pneumonia. The occurrence of rickets after whooping-cough or measles will be found, I think, to depend chiefly, if not entirely, on the question whether there has been any pulmonary complication or not. It is also a matter of common observation that children in this country suffer from troubles of respiration after the subsidence of an acute pulmonary disorder, this chronic condition being characterised clinically by Intercostal Retrocession, and by certain morbid signs preferentially occurring in the basic portions of the lungs. And because the examination of very young children is somewhat difficult in respect to the exact determination of the latter class of pulmonary disorders, I am inclined to think that we may judge of the extent to which proper pulmonary expansion is affected better by observation of the extent of intercostal retrocession than by the usual methods of auscultation and percussion. For if it be admitted, as probably will be the case, that the imperfect or insufficient expansion of the lungs is the determinant of intercostal retrocession, and that the one stands related to the other in direct proportion, it can be seen by a superficial examination of the thorax whether there is some pulmonary defect or not; and, speaking from personal experience, I am inclined to attach great value to this particular sign in the examination of rickety children. I have appended to these remarks a short table of fifty cases of rickets, selected from my note-books without preference, except for their being well-marked cases of the disease. It would have been easy to have given the columns containing details of parental antecedents, of the nature of the nourishment of these children, the state of dentition, and other information of more or less clinical and general interest, but I have refrained from doing so, as there was no conclusion of any importance to be drawn from them which has not already been clearly established.

Table of Fifty Cases of Rickets.

No. of case.	Age.	Present conditions.	Precedent cause.
1	2 years.	Wrists swollen; abdomen distended; spleen and liver palpable; crepitation with inspiration at right base.	Bronchitis when 6 months old, lasting 6 months; then improved, but subject to colds since.
2	11 mnths.	Tenderness of body; perspiration of head; wrists enlarged; abdomen prominent; no enlargement of liver or spleen; chest constricted and full of wheezing sounds; want of resonance at both bases	No illness till about 1 month ago, when there were "cough and bronchitis."
3	1¾ year.	Large head; body tender; terminals of bones enlarged; liver and spleen natural; noisy breathing all over chest; deficient resonance at both bases, especially the left.	Mother states that the child has never had cough or bronchitis, but that 12 months ago it had a cold and "wheezing on the chest."
4	3¾ year.	General tenderness; tibiæ curved; terminals enlarged; liver and spleen large; noisy breathing; bubbling râles, at both bases especially.	Bronchitis when 4 months old; subject to colds since; whooping-cough 12 months ago.
5	1½ year.	General well marked rickets; noisy râles general; deficient resonance of lower two-thirds of chest.	Perfect health till 5 months ago, when there were measles and bronchitis. Respiration 62.

[1] Translation, printed by Cole, 1861.

No. of case.	Age.	Present conditions.	Precedent cause.
6	1¾ year.	Both tibiæ curved; terminals enlarged; spleen and liver palpable; noisy breathing; rhonchi and râles general; deficient resonance of left base.	Bad attack of bronchitis when 8 weeks old; subject to colds since; measles and bronchitis 4 months ago.
7	1⅞ year.	Chest transversely constricted; breath-sounds noisy, but no râles; abdomen prominent; tibiæ curved; spleen not enlarged; body well nourished.	Bronchial attack about 6 months ago.
8	1¾ year.	Tibiæ curved forward; deficient resonance at both bases; chest full of coarse rhonchi and râles.	Bronchitis when 12 months old; subject to colds since; no other illness.
9	1⅞ year.	Tibiæ curved; chest full of râles; submaxillary glands large.	Bronchitis when between 3 and 4 weeks old; subject to it since.
10	14 mths.	General rickets well marked.	Cough from birth, caught from the mother.
11	18 mths.	General rickets well marked; chest transversely constricted, and full of râles and rhonchi.	Frequent attacks of bronchitis since 6 months old.
12	20 mths.	Tibiæ curved; cannot walk now; did so 3 months ago; spleen and liver not enlarged; body well nourished.	Bronchitis when 12 months old.
13	22 mths.	Chest transversely constricted; all the curves of the bones greatly increased; no râles in chest.	Cough at birth; measles and broncho-pneumonia 6 month ago, in winter.
14	2½ years.	General rickets well marked.	Whooping-cough when 12 months old; began to walk early, and then "went off his feet."
15	12 mths.	Dorsal curvature; nystagmus.	Bronchitis since 3 months old.
16	1¾ year.	Râles general.	Measles 8 months ago, in January, and congestion of the lungs.
17	1½ year.	Legs much bent.	Last winter severe bronchitis.
18	12 mths.	Back curved.	Bronchitis when 3 months old; never well since.
19	1¼ year.	Chest flat; arms and legs bent slightly; crepitation behind general.	Bronchitis from 3 months old; severely then and repeatedly since.
20	2 years.	Paralysis of right leg; general rickets.	Bronchitis when 12 months old, severely.
21	1⅞ year.	Wrists and legs &c. rickety; abdomen swollen.	"Hacking cough from birth."
22	2⅛ years.	General and extreme rickets.	"Bronchitis from so early that he seemed born with it," and frequently since; the mother had bronchitis severely before confinement.
23	11 mths.	General slight symptoms.	Bronchitis 2 months ago.
24	2¼ years.	"Knock-kneed."	"Little touch of bronchitis when 5 months old."
25	3½ years.	All over chest rhonchi and râles; convulsions; left leg curved.	Bronchitis when 12 months old very badly, and now again.
26	1¹⁹/₂₀ year.	Generally rickety.	Well till 10 months old, then whooping-cough badly and bronchitis; had "a kind of bronchitis" since birth.
27	2 years.	Generally rickety.	Bronchitis at 3½ months old, badly.
28	1¼ year.	A well-marked case of knock-knee and general rickets.	"Cough for several months."
29	2½ years.	General bronchitis and rickets.	Bronchitis 4 months ago; still present.
30	1⅞ year.	General rickets.	Whooping-cough 12 months ago; measles 3 months ago, and bronchitis.
31	3½ years.	Well-marked rickets; general crepitation.	Measles at birth; bronchitis when 9 months old; has never lost it.
32	1¼ year.	Well-marked rickets.	"Bronchitis almost from birth."
33	2¹⁹/₂₀ years.	Râles all over chest and back.	Whooping-cough when 8 to 9 months old; bronchitis followed and continued many months.
34	2½ years.	Bad rickets.	"Cough off and on for 12 months."
35	1⅞ year.	Well-marked rickets; general bronchitis.	Bad cough from birth; no cause except the mother having a cough.
36	9 mths.	Rhonchi and râles general.	"Bronchitis some weeks ago."
37	1⅞ year.	General rickets.	Bronchitis from birth.
38	10 mths.	General rickets.	Bronchitis from birth.
39	2⅛ years.	One of twins; the other dead; very rickety; crepitant râles general.	"Had bronchitis from time of birth (the other child died of bronchitis); the older she grew the worse she was."
40	1½ year.	Legs and back bent.	Bronchitis since birth; a fit 10 days ago.
41	2 years.	No decided signs of congestion or bronchitis at present.	"Nothing particular except a little bronchitis"; has never walked.
42	2½ years.	General rickets well marked.	Bronchitis began (in October) between 7 and 8 months ago, and continued all the winter; "congestion of the lungs in February."
43	3 years.	Rhonchi general; well-marked rickets.	Had bronchitis last winter; mother states it was so slight as "not to deserve notice."
44	1 year.	Back curved.	"Cough ever since birth."
45	1⅞ year.	Very marked rickets.	"Ill at 11 months from dentition; a little cough ever since."
46	1¹⁹/₂₀ year.	Five other children all rickety; all of them have had coughs; "they are born with them." The mother is phthisical.	Had bronchitis from birth.
47	12 mths.	Well-marked rickets.	"Had bronchitis from birth."
48	2 years.	Joints much swollen; body wasted; thorax very small.	Been ill for 9 to 10 months from cough; had croup when 6 months old.
49	2¼ years.	Fine child at birth; began to waste at 9 months; has consolidation of right lower lung; there is not much cough or sign of serious trouble.	Dentition at 9 months; said to be the cause.
50	1⅞ year.	No distinct sign now of bronchitis.	Had acute bronchitis when 6 months old; never strong since.

Savile-row, W.

TWO CASES OF ABDOMINAL SECTION IN TUBERCULAR PERITONITIS.[1]

BY A. W. MAYO ROBSON, F.R.C.S.,
HONORARY SURGEON, LEEDS GENERAL INFIRMARY, AND LECTURER ON PRACTICAL SURGERY AT THE YORKSHIRE COLLEGE.

CASE 1.—E. L.——, aged sixteen, was admitted to the infirmary on Feb. 2nd, 1888, with tubercular salpingitis and acute peritonitis. It was stated that she had been ailing during the previous twelve months, and had suffered from constipation, for which she had taken strong aperients; she had felt languid, had lost flesh, and had suffered from a cough. On Dec. 27th, 1887, after three days' constipation, she had severe pain in the abdomen, and felt sick and ill, but did not vomit; from this date she never recovered her strength, which had rapidly failed, especially after she began to vomit on Jan. 10th. A medical man saw her on Jan. 27th, 1888, and found the abdomen much distended. There being a wave of fluctuation across the lower part, a trochar was introduced midway between the umbilicus and pubes, and four pints of fluid withdrawn. The fluid was

[1] Reported by Mr. Berkeley G. A. Moynihan, M.B., House Surgeon.

greenish-yellow, specific gravity 1020, highly albuminous and alkaline, and contained granular cells, but no cholesterine. Although the tapping gave relief, she continued to get weaker and thinner, and became irritable and short-tempered. She had not menstruated since December.

On admission the patient looked extremely ill, being apparently in a dying state; her face was deadly pale, with dark, well-marked rims round the eyes; pulse 144, hard, and wiry. If allowed to sit propped up in bed, she was tolerably easy, but on attempting to lie down she had acute abdominal pain. Mucous râles could be felt throughout both lungs, and there was questionable dulness at the apices. The abdomen was much distended and tympanitic, the skin being highly stretched, thin, and glistening. On percussing the abdomen, there was resonance all over; on palpation, a slight feeling of resistance was felt in the region of the umbilicus. A wave could be obtained from one side of the abdomen to the other, as if distended bowels were floating in fluid. The bowels were confined. A catheter was passed, and two ounces of perfectly normal urine withdrawn. A full consultation of the staff was held, the unanimous feeling being that unless operative measures were speedily adopted early death was inevitable, but that operation could give only a small chance of relief.

On Feb. 4th abdominal section was performed, with full antiseptic precautions. Chloroform having been administered, an incision about two inches in length was made between the umbilicus and pubes. On exposing the peritoneum, it was found to be so adherent to the bowel immediately beneath it that had it not been for the greatest caution the gut must inevitably have been opened. On raising the peritoneum with dressing forceps, a small entrance was effected, through which, by means of the director, the bowel was gently separated, the incision being then enlarged and the finger introduced. A large quantity (several pints) of yellowish serous fluid escaped. On introducing two fingers into the peritoneal cavity, there was discovered deep down on the right side of the pelvis, a soft mass of friable rough material, which, after some separation had been effected, was found to be an enlarged and adherent Fallopian tube, the ovary being felt in its normal position and apparently healthy. A pedicle was made out on the uterine side of the enlarged mass, which was ligatured by the Staffordshire knot, the tube being then cut away beyond. The intestinal coils were much matted to one another. The pelvic cavity was irrigated with several pints of salufer lotion (ten grains to the pint). A Bantock's drainage tube was introduced, the rest of the wound being closed with silk sutures and covered with a dressing of salufer wool; jaconet was applied round the drainage tube and a sponge placed over its orifice. The mass removed was found to be the Fallopian tube, including the fimbriated extremity; it was much dilated, and must have ruptured some time previously, as the edges were everted and thickened. It was lined by a smooth membrane, and was everywhere closely studded with grey granulations of miliary tubercle.

The patient slowly rallied from the operation, and was regularly fed with nutrient enemata every four hours. She had very little sickness, and the next day could take Brand's essence and champagne, after which more substantial food was taken. Free drainage occurred through the tube, necessitating several dressings a day for the first two days, morning and evening dressings for the next three days, and then only daily changes. The Bantock tube was replaced at the end of the week by a rubber tube, which was gradually shortened as the wound contracted. The distension of the intestines subsided from the time of the operation. Flatus passed within twenty-four hours, and a natural formed motion was passed on the third day. A catheter was not required. Although the cough continued and the chest symptoms were manifestly advancing, the patient felt herself so much better during the third week as to wish to sit up out of bed, which she was allowed to do. The temperature, which before operation was constantly elevated, varying from 101° to 103°, after operation became normal every morning, rising towards evening. The chest symptoms were apparently little influenced by the relief given to the abdomen, so that her life was only saved for a month.

At the necropsy, the pleuræ showed many miliary tubercles, especially at the left base, where the lung and diaphragm were firmly connected by adhesions. The diaphragm was extensively tuberculous. There was a small amount of fluid at the right base, which had been diagnosed during life. Muco-purulent matter occupied the small bronchi. Both lungs were infiltrated with miliary tubercles, but there was little consolidation. The peritoneum was greatly and universally thickened, and infiltrated with tubercular matter, the intestines being matted by firm adhesions.

CASE 2.—A. S——, aged thirty-one, married, was admitted during April, 1884, for pelvic pain and frequent micturition, which symptoms had existed for some months, rendering her a chronic invalid, although it was only lately that she had been obliged to take to her bed altogether. Her general health was much impaired, and she had lost weight considerably. She suffered from night sweats and an evening rise of temperature. The abdomen was distended. Abdominal examination revealed a pelvic swelling on the left side of the uterus, which was diagnosed to be a left pyo-salpinx.

On May 24th abdominal section was performed, but before the general abdominal cavity could be opened it was necessary to separate the great omentum from the pelvic brim, to which it was firmly attached. The small intestines were then found to be closely matted together in the pelvis, covering the whole of the tumour in such a manner as to render it impracticable to detach them, especially as the whole peritoneum was closely studded with miliary tubercle. After sponging out the cavity, the wound was closed by silk sutures. The patient made an uninterrupted recovery, the wound healing by first intention. The temperature, elevated previously to the operation, was normal for some days afterwards, and the patient expressed herself as feeling better than before, although the pelvic abscess had not been evacuated.

Twelve days after the laparotomy, aspiration through the left side of the roof of the vagina was performed, three ounces of extremely fetid pus being withdrawn. She was so much relieved, both locally and generally, that she was able to return to her home on June 13th, within three weeks of the abdominal section. Her health improved, and she was soon enabled to undertake some of her household duties. When heard of some months afterwards, she was in feeble health and subject to diarrhœa. Although inquiries have been made, no news has been received of her since.

Remarks.—At the present time the treatment of tuberculosis is engaging the attention of the profession to such an extent that the reporting of the two preceding cases will, I trust, need no apology. In the second example, the presence of miliary tubercle studding the whole surface of the peritoneum did not in any way add to the dangers of the abdominal section, which, on the contrary, seemed to be followed by a temporary arrest of the disease and a decided improvement of the patient, who recovered sufficiently to be able to resume her household duties, although when heard of six months afterwards she was still in feeble health and subject to diarrhœa. In the first case, the acute peritonitis, for which the operation was undertaken, seemed to be the result of a rupture of a cystic tubercular Fallopian tube, the removal of which, together with the irrigation and drainage of the abdominal cavity, undoubtedly prolonged the life of the patient for a month; and, as the necropsy proved, more could not have been hoped for, as the lungs and other organs were extensively tuberculous. It is interesting to note how the extreme intestinal distension subsided within twenty-four hours of the operation, and that the bowels recovered their tone sufficiently to act naturally within forty-eight hours of being acutely inflamed and distended.

Leeds.

ON A MILD FORM OF SEPTIC TOXÆMIA OCCURRING AFTER ENEMATA.

BY G. H. BURFORD, M.B.,
LATE HOUSE PHYSICIAN TO THE HOSPITAL FOR WOMEN.

THE absorption into the blood and lymph streams of elements from decomposing masses in the intestine is a common result of habitual constipation. The condition is chronic, and its effects are slowly induced. I wish to call attention to a form of toxæmia, similar in origin, but suddenly induced and characterised by symptoms, at least in pronounced cases, peculiar to septic intoxication of a mild type. Inspissated but decomposing fæcal massæ, frequently associated with an arid, scarcely secreting mucous membrane, are innocuous so long as their dryness is maintained.

If in such case a quantity of warm bland fluid be suddenly introduced from without into the gut, solution of some of the organic products of decomposition is effected, osmosis goes on even during the short period of temporary retention, and lymph channels and blood stream are charged with a dilute diffusible septic poison. As from other parts of the alimentary canal, the effect of such general diffusion is exhibited often as a sharp attack of urticaria; but as here the diffusible poison is specially noxious, mild septic symptoms are sometimes superadded.

CASE 1.—A girl aged twenty-one, with marked gouty diathesis and intractable constipation, was under treatment for chronic endometritis. Enemata were freely administered, with the usual results, from time to time; but at length, after some days' constipation, an enema was followed by a general erythematous rash, excessively irritable, diffused over the trunk and extremities. There was also some congestion of the tonsils and fauces, but no rise in temperature was recorded. In the course of the day the rash declined, and after forty-eight hours it had quite subsided. There were no further symptoms of note.

CASE 2.—Mrs. C——, aged thirty, also under treatment for endometritis, had various mild aperients ordered for troublesome constipation; these were finally supplemented by an enema. Within a few hours a diffuse rash appeared, decidedly urticarial in type, and with considerable irritation. A sore throat with swollen tonsils further accompanied the rash. The latter gradually subsided, and in forty-eight hours was gone; but the faucial engorgement lasted some four days.

CASE 3.—Mrs. S——, aged thirty-six, convalescing from Emmet's operation, had an enema administered, and this was followed next day by a diffuse and well-marked urticaria, the wheals being very pronounced. No sore throat accompanied this eruption. In two days the skin was again quite clear, and no trace of the attack was left. Some time afterwards a second enema was necessary, and this also was followed by a similar rash, but much less pronounced and less diffused. A third enema, after a further lapse of time, had no sequelæ whatever. No pyrexia was recorded during these attacks.

CASE 4.—Mrs. A——, aged thirty-two, after dilatation of the cervix, had an enema administered, which was followed in about twelve hours by a diffuse papillary rash, with no obvious wheals, although highly irritable. In about two or three days this rash had quite subsided, and there were no further symptoms to record. The patient declared that she was never subject to rash of any kind.

CASE 5.—Miss H——, aged thirty, convalescing after operation for division of the cervix, had an enema given, subsequent to which there appeared a red rash of the urticarial type, chiefly involving the extremities and trunk. No throat symptoms or pyrexia were present. After forty-eight hours the rash had quite disappeared. Another enema, administered some time antecedently, had not produced any such effects.

CASE 6.—L. S——, aged fifty-three, after ablation of a lympho-sarcoma from the abdominal wall, made a slow recovery, during which aperients were perpetually required and enema occasionally given. After the last enema a rash rapidly developed, diffuse, irritable, erythematous, and with distinct symptoms of general malaise. The latter lasted a few days, although there was no pyrexia and no sore throat. The rash soon disappeared, being quite gone in two days, and did not recur.

CASE 7.—Mrs. G——, aged twenty-nine, convalescing from amputation of the cervix uteri. The administration of an enema in this case was followed in a few hours by a typical urticaria, diagnosed as such before the cause was discovered. This rash was diffused over the trunk and extremities, was excessively irritable, and with wheals minute but obvious. No further symptoms appeared, and the skin affection subsided in the usual time. Subsequent enemata were not followed by similar results.

CASE 8.—Mrs. D——, under treatment for cervical erosion and catarrh, had an enema administered, and a few hours afterwards a diffuse erythematous rash appeared, universal and pronounced. Coincident with this was a rise in temperature, and a sore throat sufficiently marked to require special medication. The rash soon declined; the pyrexia and sore throat abated in three or four days, with no recurrence. The temperature did not rise above 102°.

Three other cases, which were at the time diagnosed as suffering with rash after the administration of enemata, but where the details were imperfectly recorded, I can adduce. Miss A——, suffering with chronic pelvic cellulitis, had a pronounced rash, but no other symptom, after the enema. Mrs. G——, aged twenty-two, convalescent after removal of vaginal cysts, had a similar rash, ephemeral in duration. Mrs. B——, with menorrhagia from fibroid, also showed similar symptoms, confined to the skin eruption. In each of these cases a true post-enemal rash of erythematous type, ephemeral and localised, was noted, but with no further constitutional symptoms.

The foregoing cases constitute an ascending series, in which the symptoms become progressively more pronounced and extensive. Commencing with a simple erythematous rash, localised in distribution and mild in type, the next grade presents a typical urticaria, with minute but obvious wheals, diffused over the trunk and extremities, and lasting about forty-eight hours, with sometimes some concomitant malaise. Finally, the severest form has superadded to these skin symptoms such undoubted signs of mild septic intoxication as subacute pyrexia and a concurrent sore throat, the latter existing for from three to four days. These sequences presented themselves on the average after from 3 to 4 per cent. of the enemas administered. They are particularly liable to ensue if enemata be given within three or four days after the administration of ether, in cases where the intestines have not been thoroughly cleared out beforehand. They may appear indifferently after the use of any ordinary fluid as injection, provided it be used in sufficient quantity. With glycerine enemata, where very small quantities only are used, and which of late have been largely used in the Hospital for Women, no such results have accrued. I have seen cases where these post-enemal appearaces have been diagnosed as mild scarlatina or rotheln; and it is with a view of eliminating this from the category of doubtful eruptions that I have cited the foregoing cases as illustrative of a hitherto undescribed condition, as well as to record clinical observations regarding the influence of altered alimentary secretions on intestinal resorption.

Leicester.

PENETRATING WOUND OF ABDOMEN; RECOVERY.

BY G. R. E. BONSALL, L.R.C.P., L.R C.S.

ON Jan. 4th last I was called to see J. L——, aged sixteen years, son of a labourer living in a remote part, who had met with an accident about an hour previously by jumping from a height on to the handle of a pitchfork. He had been carried to his home, was undressed, and laid on a bed. The following account was given by the man working with him at the time. "The boy was on the top of some hay in a barn about fifteen feet high, and on being called threw down his pitchfork, fixing it in the ground, and sliding down became impaled on the handle. The man heard the boy's screams, and found him standing, leaning forward, with the handle of the pitchfork fixed firmly in his abdomen. He at once attempted to extricate him, and succeeded after using considerable force. The boy then walked about two hundred yards, but, feeling faint, was carried to his home, which was near."

The handle of the pitchfork had passed through the lad's trousers at the fork, slitting up the left side of the scrotum in the whole of its length to the abdominal ring, where it entered, taking an oblique course to the left hypochondriac region. A faint red line on the skin appeared on the second day, indicating the direction the handle had taken. When I first saw him, the countenance was flushed, and he complained of acute pain extending from the external abdominal ring as far as the sixth rib. Only slight hæmorrhage took place from the wound. The edges of the scrotal wound were brought together by sutures, with the exception of the abdominal opening, into which I passed my finger and did not detect any foreign body. There was hæmaturia during the first three days. The trousers were carefully examined by myself and others, but, owing to the loose texture of the cloth and frayed edges of the tear, it was not possible to make out that any piece was missing. A large fluctuating abscess formed about the seventh day in the left iliac region. Linseed poultices were applied constantly, and opium pill (half a grain was given every

four hours. A small opening appeared on the following day, discharging healthy pus copiously. The skin over a wide area threatened to break down. The poulticing was discontinued, and zinc ointment with extract of belladonna was applied on linen over the surface. The primary opening at the abdominal ring now also discharged freely. By the eleventh day (Jan. 14th) there were in all three small openings in the side, which were enlarged and drain tubes inserted. The wounds were treated with antiseptic dressings. He complained of discomfort in the bowels on the tenth day, which was relieved by enemata of gruel and castor oil. The motions were streaked with blood. On the thirteenth day (Jan. 17th) he had retention of urine, which was relieved by hot fomentations and opium pill. The symptoms passed off on the fifteenth day (Jan. 19th). From this date to Feb. 11th he continued to make satisfactory progress, the scrotal wound being almost healed. A decided relapse set in during the night of the 12th, when there was erythema over the abdomen, and the bowels were slightly relaxed. Anorexia was also present.—Feb. 13th: Temperature 103·5°; pulse 108. Wounds in scrotum reopened. Fluctuating swelling and pain along the course of the spermatic cord, also in the left iliac fossa, with frontal headache. A mixture of benzoate of soda, in doses of fifteen grains, was given every four hours, and a night draught of chloral hydrate and bromide of potassium.—14th: Temperature 102·6°; pulse 120. Rigors and cold sweats.—17th: Temperature 102·6°; pulse 108.—22nd: Temperature 99°; pulse 84. A mixture of quinine was given three times a day. General appearance much improved. The appetite, which had failed since the 12th, returned. The patient was also given a wineglassful of extract of meat and wine three times a day, with light diet. The bowels have not moved during the past eleven days. He is not uneasy. Erythema of both knees and acute pain in the left, with swelling. No headache. Wounds looking healthy, and discharging; drainage tube gradually being pushed out. Urine high coloured; no albumen.—25th (3 P.M.): Temperature 102°; pulse 102. The bowels acted twice on the previous day; now constipated; no blood in motions. Urine thick; loaded with urates.—28th: Bowels acting comfortably. The cutaneous redness of knees has disappeared. Urine depositing urates. Appetite good. Much more cheerful. Sleep rather restless. No pain. Tongue clean. Wound of scrotum almost healed. Side wounds healthy; discharging slightly. Temperature normal; pulse 72. A mixture of bark and ammonia was given three times a day.—March 2nd: Left his bed for the first time for an hour. None the worse. Slept well. Bowels regular. Urine clear and normal. General appearance improved. The erythema has disappeared entirely. No pain anywhere. Tongue clean. One of the three openings in the side had healed; the remaining two communicated, and were kept open by a drainage tube.—9th: Temperature 99°; pulse 90. From this date he gained strength daily. On March 16th, a small piece of the trousers was extracted from the opening in the side, speedy convalescence following. He walked to my surgery, a distance of several miles, on May 4th, and appeared to be in excellent health.

Remarks.—The following points in the case appear to be of more than ordinary interest. First, the course taken by the handle of the pitchfork, passing, as it probably did, between the transversalis muscle and the transversalis fascia; secondly, the bruising of the kidney, as shown by hæmaturia, following the injury; thirdly, the presence of the piece of cloth, which no doubt was the cause of the complications and retarded recovery.

Beckley, Sussex.

ANNUAL DINNER OF THE MANCHESTER MEDICAL STUDENTS.—On Nov. 27th was held the dinner of the Manchester medical students, to which ninety-seven sat down, and tickets in excess of this number were applied for by former students now in practice. Mr. Thomas Jones occupied the chair, and appropriate toasts were proposed and duly responded to.

COTTAGE HOSPITAL, CARNARVON.—On the 6th inst., Mrs. Assheton Smith formally opened this hospital, which has been established chiefly by the efforts of the Mayor, Mr. John Jones. It is situated in Segontium-terrace and Garnons-street. The premises were recently held by the Carnarvonshire Reform Club, and have been adapted for the present hospital at a cost of about £1000.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

BULLET WOUNDS OF BOTH LUNGS; RECOVERY.

By F. CHARLESWORTH, M.B. &c.

THE following case is interesting from the rarity of recovery after wounds of both lungs.

The patient, a native interpreter, of H.M.S. *Griffon*, when about to board a dhow on the night of September 29th, allowed his revolver to fall against the side of the boat, and one barrel went off and shot him in the left breast. The revolver was a naval regulation. The bullet entered one inch above and an inch and a half external to the nipple, and traversed the lung, its wound of exit being three inches to the left of the spine and one inch above the angle of the scapula. He then picked up the revolver, and whilst examining it another barrel went off and wounded him in the right chest. This bullet also traversed the lung, entering an inch above and an inch internal to the right nipple, the wound of exit being in the upper border of the trapezius, midway between the point of the shoulder and the middle line. He was brought to Zanzibar and sent to the French Hospital on the morning of Oct. 1st. On that day hæmoptysis commenced, and continued freely during the night and next day, then gradually decreased, and stopped at the end of forty-eight hours. From that time he never had a bad symptom of any kind, and was discharged nineteen days afterwards, with both exit wounds healed and those of entrance reduced to a superficial character.

Zanzibar.

IDIOPATHIC GANGRENOUS ERYSIPELAS.

By REGINALD NORMAN, M.R.C.S. ENG., L.R.C.P. EDIN.

THE following case may possibly interest the readers of THE LANCET.

I was called on the evening of Nov. 21st to see a child aged sixteen months. On examination, I found a blister on the flexor side of the left forearm, looking exactly like a burn. The next day the inflammation had extended to the shoulder, and at the starting-point of disease assumed a gangrenous appearance. The day afterwards the disease had spread over the chest, and on the following day over the greater part of the back, the patient dying on the third day from the appearance of the first symptom. I made most careful inquiries as to any traumatic origin, and could only come to the conclusion that this was a case of idiopathic gangrenous erysipelas, which, I believe, is rarely met with in this country. The progress of the disease was so rapid that no treatment was of any avail. I should be glad if any of my fellow-practitioners would report any similar cases, together with their views as to the origin and exciting causes of the same.

Skegby, Notts.

ANTE-PARTUM GANGRENE OF THE LOWER EXTREMITIES.

By T. H. E. MANLEY, M.D.

I AM induced to report this case for the reason that I am convinced it must be extremely rare, and, besides, it well illustrates how impossible it sometimes is to make a correct diagnosis.

I was called on Oct. 5th to see a woman, aged about forty years, now the mother of three children, the last three confinements having been premature. She was a fat swarthy individual, and averred that she was seven months pregnant and was sure she was in labour. Her last three deliveries were stillbirths; but this time, she said, she had "felt life" till two weeks previously, and even that day had been conscious of distinct movement. Both she and her husband were anxious to know if she were about to have a living child, as they had an impression that her health would be

much benefited by nursing one. I first listened for the fœtal heart sounds, but owing to the depth of abdominal fat and her restless state it was difficult to make a very satisfactory examination. However, I was quite certain that I detected the feeble beat of the fœtal heart, and accordingly assured the parents that their wish would be gratified with the birth of a living child; but imagine my disappointment and chagrin, after so confidently giving the parents such positive assurance, when, on making a vaginal examination, I found a breech presentation, with a peculiar feel, without natural warmth, and the skin peeling off on slight rubbing. I said nothing until I had brought a foot down and found it dead from the toes upwards. Then I had to admit that I was mistaken, and that the child was not only lifeless, but badly decomposed. With a sharp pain the infant was projected into the world, when, to my amazement, it commenced to cry with all the vigour of any full-time normal offspring. Here, indeed, was quite an anomalous state of affairs: a baby born, partly dead and partly alive. The upper extremities and body were quite natural and healthy-looking; but from the hip downwards the lower extremities were thoroughly gangrenous. The infant lived about twenty-four hours, and the mother made a good recovery.

New York.

AMPUTATION DURING THE PRESENCE OF ACUTE PHLEGMONOUS ERYSIPELAS.

BY ALEX. H. CROUCHER, M.D.

MR. W. H. T. WINTER brings forward a case of amputation of the toe during the presence of erysipelas. The following, I think, will be of interest as bearing on that point.

On July 13th of this year I removed the middle finger of Mrs. B——, aged seventy-seven, for old-standing disease. The wound did not do well, and on July 16th there was well-marked cutaneous erysipelas spreading up the forearm. This increased, and by the 19th there was great swelling and œdema of the forearm, extending also to above the elbow; there was evidence of disintegration of the wrist joint from pus formation. As the fever was great and the agony of pain severe, and it was evident the disease would soon prove fatal to a person of her age, it was decided to remove the hand at the wrist joint; this was done. After the hand was removed, a quantity of pus was able to be squeezed downwards to the cut surface by pressure with the hand. The patient, notwithstanding her advanced age, and the fact that there was much albumen in the urine, made an excellent recovery, and that rapidly. There was a swelling on the anterior aspect of the elbow joint for a fortnight afterwards, but it disappeared without trouble. Four days after the operation the patient was able to sit in an armchair and partake of fish for dinner.

Eastbourne.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. THOMAS'S HOSPITAL.

SUPRA-PUBIC CYSTOTOMY; COMPLETE SUTURE OF THE BLADDER WOUND: PRIMARY UNION; SCARLET FEVER; RECOVERY; REMARKS.

(Under the care of Mr. JOHN CROFT.)

IN the case of this patient Mr. Croft endeavoured to obtain primary union of the wound after removal of a calculus from the bladder by the operation of supra-pubic cystotomy, which during the last few years has been so extensively practised. At the onset of the attack of scarlet fever, when it was yet doubtful as to the cause of the high temperature, it was considered advisable to remove the superficial stitches to give exit from the wound to any fluid which might have accumulated in it. The bladder sutures were not removed, and no urine escaped between them; the incision in that viscus had healed. Although the superficial part of the wound was thus laid open, and closed later by granulation, the suturing of the bladder was of great service; the duration of the case was shortened, and the patient rendered comfortable, being able to pass urine naturally. Various methods of treatment of the wound have been employed after this operation, and many different opinions expressed on the question as to whether sutures should be used or not. Sir Henry Thompson[1] says: "I have seen no danger of infiltration if the opening is left quite free for the purpose. The only attempt I have made to limit its extent has been by introducing a large suture about an inch below the upper angle through the abdominal walls, and sometimes another an inch below that, but I have never used a single suture in the bladder." In 1750 Pallucci proposed a perineal incision for drainage, and suture of the abdominal wound. Côsme, in 1758, proposed suture of the wound. Pinel Grandchamp, in 1826, proposed suture of the bladder wound. Baudens sutured it after extraction of a bullet, and Bruns practised suture of the bladder. In healthy conditions of urine and bladder there is no doubt that much can be done by suturing. Parker[2] records a typical case in which he obtained primary union of the entire wound after suturing without the employment of a drainage tube. Others have done the same, but in the majority of recorded cases the external wound has not been completely closed, surgeons having preferred to make provision should there be any extravasation of urine. Pilcher, who used harelip pins for the external wound and three rows of sutures in one case, says[3] that suture of the bladder should be performed by Gély's method, "en piqué entrecoupe," and not neglected as in France. By means of the suture the after-treatment may be shortened by ten days. He denies that infiltration of urine is more frequent after suture of the bladder wound. Svensson of Stockholm[4] considers that the application of some sutures to the bladder serves to check posterior hæmorrhage, and may be requisite for the purpose; his experience is that posterior hæmorrhage occurs in an eighth of the cases if the sutures are not applied to the wound in the bladder.[5] Primary union was obtained in eight out of eighteen cases of suture of the bladder in children under fifteen, and in adults two out of eight.[6] Meyer collected forty-one cases, of which the wound reopened in seventeen; it is not stated what the treatment of the superficial wound was. It is said that nearly one-third of the cases of suture of the bladder have healed by first intention. The opinion is that no catheter should be employed after the operation when the bladder wound is thus united. The method of using forceps to close the urethra in case of the performance of the operation in the female, as done by Mr. Croft, is one worth remembering, as it proved efficacious, and no ill effect followed. Its employment made the use of any special apparatus unnecessary.

F. M——, aged eight, was admitted on May 16th, 1887, when he was suffering from the ordinary symptoms of stone in the bladder. The symptoms were first observed three years ago. On sounding, a small stone was struck. The urine had a specific gravity of 1020; it was alkaline, but not offensive, and did not contain any albumen.

On May 20th supra-pubic cystotomy was performed. The bladder was distended and a rectal bag used. A small lithic acid calculus was removed. The bladder was washed out with a 20 per cent. solution of boracic acid. The opening in the bladder was carefully closed by the insertion of ten sutures, which were introduced after Lembert's manner. Five sutures of fine silk were made to alternate with five of prepared gut. The bladder was again syringed out, and shown to be water-tight. The external wound was closed with the help of catgut sutures through the linea alba, and silk sutures in the more superficial parts.

On the second day after the operation a red rash came out, accompanied by sharp constitutional disturbance. This proved to be scarlet fever. In a month's time he was convalescent from this attack, but in about another three weeks

[1] Diseases of the Urinary Organs, 1888.
[2] THE LANCET, vol. ii., p. 9, 1886.
[3] Annals of Surg., 1886, p. 357.
[4] THE LANCET, vol. ii., p. 531, 1887.
[5] See Case of Secondary Hæmorrhage after Suture, THE LANCET, vol. i., p. 930, 1887.
[6] Sir W. Mac Cormac, Harveian Oration, Feb. 1887: Statistics of ninety-one cases.

he suffered from a relapse. During this severe constitutional illness the wound in the bladder remained perfectly watertight and healed soundly. No urine escaped at any moment by the wound, and it all came naturally by the urethra from the time of the operation. The superficial part of the external wound was relieved of its sutures on the day on which the temperature ran up and the rash appeared. This part therefore healed by granulation.

Remarks by Mr. CROFT.—The case is worth recording for this reason: primary union of the wound in the bladder was obtained in spite of the very adverse circumstances of the general illness from scarlet fever and the local loss of support in consequence of the early removal of the superficial sutures. The following case did not occur in my hospital practice, but I refer to it as illustrating this operation for large calculi in the female bladder. The patient, aged twenty-five, had suffered from paraplegia for six years, with more or less incontinence of urine. The symptoms of stone had only been recently observed, and its presence ascertained. I considered that it was better to remove the concretion by the supra-pubic method, as it was a very large one. This was done early in July of this year. The rectal bag was used, and the bladder injected with about five ounces of warm boracic solution, which was retained in the bladder by a light clamp forceps placed on the orifice of the urethra. The peritoneum extended low down, but was easily held out of the way; and the stone, which consisted of mixed phosphates, and weighed a little more than three ounces, was removed after dilatation of the incision made into the bladder. In this instance, considering the character of the urine, the presence of chronic cystitis, and the nature of the wound in the bladder, I did not suture the bladder wound, but closed the external wound with four silk sutures, fixed a drainage tube in, and applied dry iodoform dressing. On the second day some œdema was observed over the right half of the sacrum. On the seventh day two sutures were removed and the wound shortened. The remaining sutures and the tube were removed on the ninth day; the wound had permanently closed on the nineteenth day. In this patient the orifice of the urethra projected in an unusual manner, and I was enabled to make use of this fact, employing the method mentioned, which proved not only effectual, but also harmless. I ascribe the condition of the urethra to the irritation of the urine constantly passing from the inflamed bladder, and to the more recent straining from the presence of the stone.

LONDON TEMPERANCE HOSPITAL.

STRANGULATED INGUINAL HERNIA; KELOTOMY; REMOVAL OF SAC; MENTAL DISTURBANCE, CULMINATING IN ACUTE MANIA ON TENTH DAY; RECOVERY.

(Under the care of Dr. W. J. COLLINS.)

THE mental derangement which followed the operation for hernia in this case presents many points for consideration, and our readers will do well to consult the paper by Dr. Savage to which Dr. Collins refers in his remarks. For the subjoined notes we are indebted to Dr. W. Winslow Hall, C.M., registrar and pathologist.

At 1 A.M. on Sept. 17th, 1888, J. S——, a healthy-looking man of sixty-nine years, rose to micturate. For sixteen years he had suffered from a reducible left inguinal hernia, and he habitually wore a truss. On this occasion he was wearing no truss, and, as he stood and strained, the rupture came down. He found that it was larger than usual, and quite irreducible. In the course of the morning a medical man tried twice to reduce it by taxis, but failed. At 3 P.M. the patient was admitted to the London Temperance Hospital, and was seen by Dr. Collins. Taxis was tried, but without success. Fifteen minims of tincture of opium were then given, and, the patient having been laid in a warm bath, taxis was again used unsuccessfully. Then chloroform was administered, but repeated taxis was still futile. Dr. Collins therefore operated, making the usual incision. He dissected down, opened the sac, divided the stricture, returned the bowel (which was glistening and damson-coloured), ligatured the sac at the level of the internal ring, and removed its fundus. After irrigating the wound with a solution of perchloride of mercury (1 in 1000), a drainage tube was placed along its whole length, the edges were brought together by silver sutures, iodoform was puffed over the line of junction, and iodoform wool was applied. The quantity of chloroform used during the operation was six drachms and a half. At 7 P.M. the patient took twenty minims of tincture of opium, and ice was sucked occasionally.

Sept. 18th.—The man complained of nausea, and said he had been sick four times. His tongue was dry and shaggy; he had slight epigastric tenderness, but there were no other abdominal symptoms. In the afternoon his temperature reached 99·6°, but in the evening it fell, and it never again reached that level. His mental attitude, however, attracted attention. He was garrulous and weakly amiable. He complained of headache, and was much annoyed by the noisy traffic in the street outside the ward.

20th (third day). — The wound was dressed, and was found to be uniting by first intention. The tube had been displaced, and lay altogether outside the wound. Iodoform was puffed on, and iodoform wool was again applied. Beef-tea was given. The urine had been alkaline, with a specific gravity of 1024, and free from albumen ever since the operation. Mentally, the man was in the same state as on the day after the operation.

22nd (fifth day).—The patient was free from pain and sickness, but his tongue remained dry and coated. His headache and intolerance of noise continued, and the night nurse noticed that his manner was strange. He himself complained that he was becoming deranged.

24th.—The bowels acted for the first time.

25th.—Wound dressed; there was slight separation of the edges. Fish and milk were added to the beef-tea diet. The night nurse reported that during the night he got up and walked about the ward, but seemed to have no delusion.

26th.—Retention of urine was found, and twenty ounces of urine were drawn off by a soft rubber catheter; this urine was clear, had no deposit, was acid in reaction, and contained no albumen. During the night he was very restless.

27th.—At 5 A.M. the patient took some milk-and-water Then he became noisily delirious, and refused all food and drink. At 8.30 an enema of milk and Brand's essence, with twenty grains of bromide of potassium and fifteen of hydrate of chloral was administered. He persisted in getting out of bed to look for a policeman; consequently he was strapped down at 10 A.M. The wound was dressed, and it was found that the upper end of the incision had healed, while the lower end continued to discharge slightly. No iodoform was used. Pulse 140; temperature 99°; respiration quick; copious perspiration. At noon the fourth of a grain of morphia was given hypodermically, and he slept till 6 P.M. On waking he was noisy again, and continued to shout "Police!" and "Murder!" At 9 P.M. he was placed in a separate ward. As he had passed no urine, a catheter was introduced and twenty-eight ounces drawn off at midnight.

28th.—The patient continued in the same excited condition, shouting "Murder!" and declaring that his attendants were trying to poison or otherwise kill him. At 1 P.M. he had another hypodermic injection of a fourth of a grain of morphia. Small quantities of milk, beef-tea, Brand's essence, and veal broth were administered with difficulty.

29th.—During the day the same state of matters continued. But during the night he was less violent, though he had no sleep.

30th.—At 11 A.M. he began to shout again, and continued to do so till 5 P.M. Then he slept most of the evening, took plenty of nourishment, and passed a quiet night.

Oct. 1st.—The patient was quiet and sensible all day. He was again feebly amiable, and was quite aware that he had been mentally deranged.

2nd.—He had a quiet night, and was perfectly rational. The wound had healed completely. In spite of his violent efforts during the attack of mania there had been no bulging at the wound. During the day he was removed to his home close to the hospital.

8th.—The patient came to see Dr. Collins, sound in body and mind, and full of contrition for the trouble he had given.

It is noteworthy that there was no history of nervous disease in the family of this patient. His ancestors were all healthy, long-lived, country people. As for the patient himself, his wife is certain that for the last fifty-two years and a half he has had no nervous symptom beyond an attack of sciatica sixteen years ago. Forty years ago he had acute rheumatism. The attack of acute mania might have been due either to iodoform poisoning, or to the anxiety and worry

of the hours preceding the operation, or to the action of the anæsthetic. The theory of iodoform-poisoning may be put aside, for the total quantity used was small; there was almost no absorbing surface; the symptoms did not tally with those present in iodoform-poisoning. Probably both the anxiety and the anæsthetic contributed to the mental break down.

Remarks by Dr. COLLINS.—Here was an amiable, well-behaved old gentleman, who went through an uncomplicated operation and cure of a strangulated inguinal hernia without a single adverse traumatic or intestinal symptom, yet who, after a few days' childish imbecility, broke out on the tenth day after operation into an acute attack of mania. The search for the cause of a change as profound as it was transient in the mental arrangements of this patient must be instructive, even if futile. Was the causation simple or single, or complex and contributory? Family and previous history are silent of suggestion. The intestinal strangulation, so rapidly relieved, the operation itself, or the subsequent process of repair, alike devoid of damaging incident, must, I think, be acquitted. The restricted dietary of the first few days can hardly be allowed to have had other than weakly predisposing influence. Dr. Hall, in his note, has hinted at chloroform as the possible cause, and has referred me to Dr. Savage's valuable article upon Insanity following the use of Anæsthetics.[1] I am inclined to believe that chloroform was the exciting cause of the mental disturbance in this case. Fatalities under chloroform are unfortunately not as rare as could be desired, but records of after effects of chloroform of a serious or alarming character are very few and far between. Is it that they do not happen, or that when they happen their explanation is misapprehended; or is it that the very incalculable beneficence of chloroform itself has created an indisposition to allow occasional unpleasant results? For my own part, I believe that cases of mental disturbance following chloroform administration, though rare, are not very rare—not quite so rare as the scanty literature upon the subject would suggest. Dr. Savage's paper above referred to appears to be the only attempt to collate the evidence upon the subject. He lays down the very plausible doctrine that any cause of delirium may start insanity, either a transitory mania or a persistent dementia. When the profound changes which chloroform is known to effect in the blood, and the equally profound, though less understood, changes it presumably effects in the cerebral cells, are considered, the surprise is rather that mental disturbance consecutive to chloroform anæsthesia is so rare, than that such cases should be regarded as exceptional. The analogy with alcohol delirium and alcohol dementia is at once apparent. In many cases it is possible that the operation is accused, whereas the anæsthetic which it necessitated is guilty. Witness Mr. Barwell's case in the Clinical Society's Transactions, vol. xviii., p. 199, headed "Unusual Sequela of Ovariotomy." The particulars were almost identical with those of the case related above: uncomplicated ovariotomy in a young woman; on the seventh day hysteria; on the ninth acute mania; finally recovery, and admission that "she had been mad." Here the possibility of the anæsthetic being the cause of the excitement is so absent from the mind of those concerned that the nature of the anæsthetic employed is not mentioned; it is not enumerated in the list of five possible causes which Mr. Barwell discusses; and, moreover, chloroform was administered as an antidote, without much apparent benefit. The possibility of the iodoform employed in the dressing having been absorbed was suggested; but the quantity used was small, and owing to the almost immediate union of the wound there was practically no surface for absorption. Of course the close kinship between chloroform and iodoform should be borne in mind, both being tri-haloid derivatives of marsh gas (CH_4)—viz., $CH Cl_3$ and $CH I_3$; and cases of poisoning by the latter, presenting somewhat similar symptoms to those detailed, have been recorded. Brunton[2] says: "In slight cases iodoform causes sleeplessness, headache, irritability, and loss of memory; in severe cases, maniacal attacks, hallucinations, or melancholia." The prognosis in cases of this kind, is, according to Dr. Savage, not always so good as the sequel to my case would suggest; presumably the gravity is in ratio to predisposition from other cause or causes. In treatment I would insist on ample nourishment, forcibly administered if persuasion fail. Easily assimilable, unstimulating diet is here, as in so many other nervine disorders, of paramount importance.

[1] British Medical Journal, Dec. 3, 1887. [2] Pharmacology, p. 729.

TIVERTON INFIRMARY.

A CASE OF MEDIASTINAL GROWTH; DEATH; NECROPSY.

(Under the care of Mr. MICHELMORE.)

THIS case is an example of rapidly-growing tumour of the mediastinum, and differs little from other instances of the disease. The nature of these growths is sometimes cancerous, but more frequently they are of lymphadenomatous or sarcomatous character.

W. D—— was admitted on Oct. 9th, 1888, and died on Nov. 9th following. The patient stated that his father and mother were alive and healthy. He had six brothers and four sisters, who were also in good health. No definite history of malignant disease could be traced in his other relatives. He had himself enjoyed good health until within three months ago, when he was taken suddenly ill one evening after bathing, with pains in the left side, some difficulty in breathing, and a general feeling of malaise. A medical man was sent for, who told the boy's parents that he was suffering from a severe chill. He ordered the side to be poulticed, and confined him to his bed for three or four days. The boy was unable to follow his occupation (he was a shoemaker) on account of increasing dyspnœa, extreme debility, and severe paroxysms of dry, hacking cough.

When admitted, the patient was a sallow-looking young fellow, seventeen years of age, somewhat emaciated. His breathing was very rapid and shallow, with continual expansive movements of the alæ nasi; and there were frequent attacks of harsh dry cough, which caused him to appear as if he was on the verge of suffocation. Pulse 120, very feeble and dicrotous, and scarcely to be felt at the wrist. His temperature was 100° on admission; but it fell to 99° on the following morning, and never went above this during the whole course of his illness. Urine acid; high coloured; no albumen; deposit of urates. Chest and abdomen: Covering the upper portion of the sternum and firmly attached to the bone was a globular swelling about the size of a Tangerine orange, the skin covering it being somewhat tense, and on palpation there was an indistinct feeling of fluctuation; no prominent superficial veins were to be seen on its surface, and there was no glandular swelling in the axilla or in the subclavicular region. Lungs: Increased resonance on percussion, loud breath sounds, and increased vocal resonance over the front of the right lung; at the base marked dulness, breath sounds very feeble, and vocal resonance much diminished. Over the front of the left lung dulness was almost complete, breath sounds could only just be distinguished, and both vocal fremitus and vocal resonance were much diminished; at the base the signs were very similar to those on the right side, but at one spot, about three inches below the inferior angle of the scapula, ægophony was very marked. Heart: The heart was displaced to the right of the sternum, and its beats were heard most distinctly in the right axilla. Liver: The area of hepatic dulness was greatly increased, and the organ was enormously enlarged and irregular in shape, there being several projecting prominences.

This boy gradually went from bad to worse. The dyspnœa increased; the cough was very troublesome ("expectoration only occurred three times during his illness, and once it was of a distinctly pneumonic character"); he frequently complained of pain at the interclavicular notch, and over the liver; the left leg and thigh became very much swollen, cold, and tender to touch, especially along the course of the internal saphena vein; he suffered a good deal from nausea and vomiting, though the appetite continued good until the end; emaciation was not marked, but debility was extreme; he lost control over his bladder, and died from exhaustion a month after his admission.

Necropsy.—Only a partial post-mortem examination was allowed. On dissecting back the skin and muscles covering the chest, the globular swelling over the sternum, which had increased in size, was found to be firmly attached to the bone, and, on opening the thoracic cavity, the under surface of the sternum was seen to be much eroded, and perforated by a growth which sprang from the anterior mediastinum and was in connexion with the external tumour. There were well-marked pleuritic adhesions, and the right cavity contained an abnormal amount of fluid. The left lung was infiltrated with a soft cancerous material, which broke down readily under the finger. The heart was pushed to the right of the sternum. The liver was

enormously enlarged, and almost filled the abdominal cavity; its surface presented several raised nodular projections of a whitish colour, each about the size of a large marble; and its substance was also infiltrated with morbid material.

Remarks by Mr. MICHELMORE.—The tumour over the sternum was of a greyish-red colour and very soft in consistence, breaking down readily; and I should think from the appearance of the growths in the mediastinum, lung, and liver, and the rapid manner in which they destroyed life, that this was most likely a case of encephaloid cancer.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Primary Union after Excision of Tubercular Hip Joints.

AN ordinary meeting of this Society was held on Dec. 11th, the President, Sir Edward Sieveking, being in the chair.

Two papers were read on Primary Union after Excision of Tubercular Hip Joints by Mr. BARKER and Mr. BILTON POLLARD, of which the following are abstracts:—

Mr. BARKER stated that the object of his paper was to emphasise certain conclusions he had put forward in his Hunterian lectures at the Royal College of Surgeons last summer. Briefly stated, these were as follows:—1. That scrofulous, or, in other words, tubercular joint disease was a local expression of infection of the tissues with the bacillus tuberculosis, and ran, as a rule, a course beginning in hyperplasia and ending in fatty degeneration. 2. That at a certain stage of the disease the complete removal of the infected tissues ought to be possible. 3. That if complete removal of the tubercular tissue from the hip be accomplished, the resulting wound ought to heal in many instances by first intention throughout, as in the case of the knee, and often even without any necessity for drainage. The great advantage which would flow from such primary union after excision were then briefly discussed. The author then described his first case operated on after the above propositions were made last June, and showed that they were justified by the result. The patient was a boy, aged five years, who had been under careful treatment for a year for hip disease, which resulted in destruction of the head of the femur and the formation of an abscess of the usual kind. After operation on the lines indicated, primary union took place without drainage under one dressing, and the patient left the hospital on the fourteenth day, wearing a double Thomas's splint. The latter was removed in the eighth week after operation, and the child went to the seaside, when he began at once to run about, and had been quite well ever since. Other cases were alluded to in which Mr. Pollard had since obtained similar results as regards primary union by operating on the same principles. This case was exhibited to the Fellows of the Society.

Mr. POLLARD drew attention to the fact that the wounds necessary for the extirpation of tubercle from joints would heal as rapidly and as permanently as other wounds of a similar size if certain essential conditions were secured. 1. The whole of the tubercular growth must be removed. 2. Perfect asepsis must be assured. 3. Bleeding must be checked and the wound made as dry as possible. 4. Oozing must be restrained by the even elastic support of a wool dressing and a moderately tight bandage. 5. Absolute rest of the part must be maintained during the process of healing. The hip joint was selected for illustration of the views advanced because the author thought that, of all excised joints, the hip had been found the slowest to heal. Four cases of advanced hip-joint disease with caseous abscesses were referred to. Three were operated upon by the anterior incision and the fourth by a curved incision round the upper and posterior part of the trochanter. Drainage tubes were not employed in any of the cases. The dressings were changed on the seventh day after the operations, and the wounds were found to have healed by first intention throughout. With the exception of one case in which the acetabulum was perforated, there had been no recurrence of the disease. Three of these cases were brought to the meeting for inspection and criticism.

Mr. CROFT desired to congratulate the authors of the papers on the results they had obtained; he considered the occasion marked an epoch in the surgery of the hip joint. Carrying his memory back eighteen years, he pictured the surgery of the hip joint as being then in a condition which would now be thought deplorable. Any operation considered necessary was put off till the last stage of the disease. In 1880 he brought before the Clinical Society a paper on forty-five cases of excision of the hip; the subject was then freely discussed, and the general opinion was, on the whole, very decidedly against early excision. A committee was appointed, he himself being a member, to inquire into the matter, and their conclusion was that excision was undesirable unless sinuses or dislocations were present—that is, in the last stage of the disease. But notwithstanding this adverse opinion of the committee, he continued to perform the operation in those cases that appeared to him suitable. It was quoted against him that the percentage of deaths (30 per cent.) was much too large, but since his first paper he had operated on fifty-three cases, making a total of ninety-eight. These he had been recently tabulating, and he found that this last series gave only a mortality of 15 per cent. Of the fifty-three cases ten were cured within six months, one of them being well within a month; eighteen were well within one year, and twenty-seven within two years; that was, more than half of the cases were known to be absolutely cured within two years of the operation. For an excision wound to be well in a week was astounding to those accustomed to the ordinary course of such wounds, and to have achieved such an advance was something to be proud of. In 1880 the question was whether excision should be performed at all; now it seemed to be taken for granted that the excision was to be done in an early stage of the disease. He had not operated by the anterior incision, but he could see that with antiseptic precautions, use of deep sutures, complete extirpation of all diseased tissue, and limited excision of bone there were immense advantages attaching to it.

Mr. BRYANT did not know that he could accept the conclusion that excision should, as a matter of course, be done early. The whole question was still *sub judice*. In Mr. Pollard's cases, which he had had an opportunity of examining, rapid union followed early excision. He did not like to criticise the *modus operandi*, but he should like to have seen the joints that were removed. Admirable results had no doubt been obtained by the authors of the papers, yet he felt bound to question if these joints could not have been guided to a cure by natural means had they been given the chance, and the surgeon should always have the question of the possibility of natural repair before him when contemplating operative measures of treatment. He did not wish to deny that such an amount of mischief might be present in a joint that Nature could not well by herself effect a cure; in one of Mr. Pollard's patients, for instance, a sequestrum was found, and this could not have got well alone. In cases of early inflammation of the hip joint—and whether the tubercle or the inflammation were primary he did not know—his own tendency was still in favour of expectant treatment; he believed firmly that the bulk of cases, if taken early, could be cured by such treatment alone. If early cases were excised, one would expect to get early healing, for a wound going through healthy tissues should repair quicker than an incision into what was often a mere suppurating cavity. He thought that Mr. Croft should have stated that the earlier cases which he obtained for his paper, in which the mortality was 35 per cent., were collected from various hospitals before the modern methods of treatment of wounds were in vogue; and though he had got a mortality of only 15 per cent. in his later series, yet he had not succeeded in showing that such joints could not be cured by natural means. Mr. Barker's patient was getting up and walking after eight weeks, but he considered this was bad practice, and a miserably deformed and useless limb was apt to follow. In the earlier cases that he himself operated on, he was disposed to let the limb have too much movement, but he had obtained much better results when they were kept at rest for six or twelve months after the operation.

Mr. HULKE said that much turned upon the stage when the operation should be done. He was convinced that, if properly managed in the early stage, treatment short of excision would conduct a case to a natural cure; and in a certain number of cases also in later stages results could be obtained by this method better than those after excision.

the bony synostosis which followed being better and firmer than when portions of bone had been ablated. He was surprised at the high mortality of Mr. Croft's cases; he felt sure that in his own practice and in that of his colleagues the mortality had not been 30 and was not now 15 per cent. The terms "healed" and "cured" had been used, he supposed, relatively: there had been primary union of the external parts; the deeper parts could hardly have closed, for there was a cavity present to be filled up. He had seen a not inconsiderable number of cases heal rapidly, although a drainage tube was present. It was interesting to hear that the synovial membrane could be thoroughly removed by scraping through so small an opening as the anterior incision; at a recent meeting of the Society, a surgeon, referring to the knee, had held that a large opening was essential, and nothing but careful dissection with a scalpel could thoroughly clear away the diseased tissues, but dissection through such a small orifice would be extremely difficult at the hip joint. He had never practised the anterior incision, which, if his memory served him, was introduced by the elder Hueter of Greifswald, who always combined it with a posterior perforation for purposes of drainage. If the drainage tube could be dispensed with, then a great objection to the anterior incision was removed.

Mr. HOWARD MARSH had never before seen such good results from excision of the hip. The method could scarcely be described as new, for probably all surgeons had met with instances of union by the first intention after excision of tubercular joints, and it was now usually anticipated in the case of the knee joint. He had, as a rule, operated on the hip by the posterior incision, but he was inclined now to think the anterior better. As regarded the general view that should be taken of the applicability and results of excision, we had still to contrast that treatment with the expectant, and he thought that Mr. Barker's case was a very disappointing one; the child would probably never walk with a serviceable limb; it was already flexed, adducted, and rotated inwards. He did not think it judicious to let a child walk about two months after such an operation, and the result reminded him of what was frequently seen after knee excision: a large proportion of those allowed to walk early returned later with deformed joints. He considered that the result obtained by prolonged rest in the early stage was a better one than after excision. The inveteracy and intractability of tubercular disease had been much exaggerated, and the results obtainable by rest underrated. He was prepared to show cases in which, even though suppuration had taken place, yet with rest perfect restoration of the joint had followed.

Mr. CROFT desired to correct a misimpression. When he said that he had a mortality of 15 per cent. in his fifty-two cases, he did not mean deaths in consequence of the operation, for with one exception the fatal result was due in all cases to tubercular disease after the operation.

Mr. KEETLEY related a case of excision of the hip which had united by the first intention, buried sutures being used without drainage tubes. Six weeks afterwards the child died of tubercular meningitis, and he made a careful examination of the articulation; there was scarcely a trace of cicatrix, and no cavity, the end of the femur being united to the acetabulum. He felt bound to state that he had seen much better after-results from rest than from excision. He demurred to Mr. Barker's suggestion that primary union was new; it had followed in hip cases as in others to antiseptic surgeons. Referring to the drainage tube, he said it was not an essential in surgery; many cases treated with buried sutures did well without them, and so did osteotomies, but these instances did not prove that they ought to be dispensed with; they were a good safeguard against failure or mistake on the part of the surgeon, for no man, however careful, could always ensure asepsis of a wound, and strong antiseptics were themselves irritating and might excite discharge; besides, the presence of a drainage tube was not inimical to early convalescence. Pressure around a wound, if all the diseased tissues were not removed, might favour self-infection from it.

Mr. WRIGHT (Manchester) had 800 cases of hip-joint disease under his care during the last few years, and he had performed excision about 130 or 140 times. He was prepared to agree with those who said that, if early cases were taken in time, a cure would follow without operation; but, as Mr. Holmes had pointed out, not only time but the social circumstances of the case had to be taken into consideration; in many cases it was absolutely impossible to secure the necessary prolonged rest. He had not obtained primary union in any of his cases, for he had seen no necessity for it, and therefore had not sutured the excision wound, but simply placed in a drainage tube. He preferred section of the bone through the trochanter rather than above it. Tuberculous foci appeared to him generally to be present in the bone, the ligaments, and the synovial membrane, and he had found himself hitherto, either by the anterior or posterior incision, entirely unable to completely remove those foci, and the material, he thought, required excision rather than scraping. When left behind, it was the cause of the relapses so commonly met with, and which were excited often by the slightest injury. He thought the cases related could not fairly be considered cases of early disease; the one with the sequestrum was certainly not open to the charge that natural repair could have followed if the case had been left alone. The question generally was, could the child's constitution stand the lengthened confinement required for natural repair? and this was often one great argument in favour of excision. After operating, he was in the habit of applying a Thomas's splint for six months or a year, because, if prolonged rest were not ensured, increased shortening took place from the relaxation of the soft newly-formed structures. A death after excision was often not the fault of the operation, for perhaps only one caseous focus out of many was removed.

Mr. MAKINS said he was in Germany in 1879, and visited Volkmann's clinic at Halle. Volkmann was then an ardent advocate of early excision, and his cases healed by primary union; he did not apply splints, relying only on extension. At a second visit, three years later, he found that Volkmann had abandoned the operation because of the exceedingly bad after-results. In some cases the disease had recurred, despite the more careful ablation of morbid tissue, some grew up with badly-developed limbs, and in others there was suppuration and sinuses were present, the cases being as bad as if no operation at all had been done, yet no surgeon could possibly take more trouble than Volkmann did to thoroughly extirpate all the diseased structures.

Mr. BARKER, in reply, said that in the case he had related the patient had been treated very carefully for a year by the expectant method, first by immobilisation and then by aspiration; and at the operation the head of the bone was gone, the acetabulum eroded, and large abscesses were present; such a joint could certainly not be called an early case. He strongly condemned excision until every hope of cure by natural means had been exhausted. The child's general condition at the present time was certainly very much better than it would have been if no operation had been done. His usual practice was to keep on a double Thomas's splint for months afterwards, and the apparatus had been removed in this case without his sanction. In reply to a question concerning the use of iodoform emulsion, he said that the wound was filled with it, and then as much as possible was pressed out, and very little indeed remained behind when the sutures were applied. In order to avoid irritation by antiseptics he used irrigation with boiled water during the operation as hot as could be borne by the hand, and then finally mopped out the cavity with an antiseptic solution.

Mr. POLLARD said that all his cases were progressing towards the third stage; the acetabulum was diseased; the head of the bone carious, and abscess was present beneath the skin. He disclaimed any desire to excise if the cases could be got well without, for he recognised that the results of natural cure were better than those of excision. If the wound healed by primary union many after-risks were obviated.

MEDICAL SOCIETY OF LONDON

The Absolute Signs of Death.

AN ordinary meeting of this Society was held on Dec. 10th, Sir William MacCormac, President, in the chair.

Dr. B. W. RICHARDSON read a most able paper on the Absolute Signs of Death. He commenced by saying that in the present day, owing to the discussions that were taking place on the subject of cremation and the disposal of the dead, members of the profession were more frequently being called in consultation in order to determine if life were actually extinct. He proposed, therefore, to state in a very practical form, firstly, the common circumstances under which the inquiry was demanded; secondly, the methods

for determining the absolute proofs of death; and thirdly, a summary of efficient practical details. Under the first of these heads, the author specified the reasons which led the friends of persons supposed to be dead to question the fact of death. These were: (*a*) Changes of colour of the dead body. He related a case in which a woman had died of what was believed to be suppressed scarlet fever. The body at the time of death was of a dark hue, but afterwards the cheeks assumed a red colour, and the body also took on a life-like red tint. He had since seen at least two similar cases, and their explanation was simple; the blood became oxidised after death, the necessary gas transpiring through the skin. (*b*) Retention of warmth. This was likely to occur especially in cases in which death was sudden, when rigidity developed early, and the temperature immediately after death went up a few degrees. (*c*) Movements of the body, or supposed movements. The former occurred only in cases of Asiatic cholera; they were often life-like in their character, and in strong people who had died rapidly they might continue for at least an hour after death. The commonest supposed movement observed by the friends was a gentle heaving of the breast. (*d*) Retention of life-like expression after death. This happened most frequently in children. (*e*) Prolonged preservation of the body from putrefactive decomposition. The post-mortem change usually set in between four and twenty-four hours after death, but it might be delayed for eight or nine days in exceptionally cold and dry seasons; in those of spare constitutions and suffering from wasting disease it might be retarded even when weather and other circumstances were favourable; copious draughts of alcohol before death might also tend remarkably to act as a preservative. (*f*) Suspension of the ordinary phenomena of vital action after some forms of induced narcotism. He quoted as a historical fact of interest in this connexion the use by Jewish women of a narcotic wine, which they administered to those about to die a lingering death by crucifixion at the hands of the Romans. This was called "morion," the wine of Mandragara, the "death wine" of Pliny. It had also been used in olden days to produce insensibility before applying the cautery. Dr. Richardson exhibited a sample of it to the Society. Hydrate of chloral acted in a similar way, producing such a deep narcotism in large doses that it was almost impossible to say whether the person were alive or dead. (*g*) The cataleptic state, idiopathic or traumatic. Dr. Richardson had observed a case of a man who became cataleptic, and almost the only sign of life was the sustainment of animal warmth. From a first attack the patient recovered completely, but a second proved fatal. Traumatic catalepsy was induced by lightning strokes, by the reception from a battery of a high tension electric discharge, and by severe blows or contusions of the head. In 1869 there occurred a case of a man who was rendered cataleptic by a lightning stroke, and who narrowly escaped living burial. One other circumstance might also give rise to the inquiry—viz., a request on the part of a person whilst living to be subjected to skilled examination after death in order to prevent the possibility of being buried alive. The author twice in his career had been called in to meet this request. The various circumstances which might lead to a doubt as to absolute death—some of them very important and singular—were next described in detail; and then followed the second part—namely, the actual or veritable proofs that had to be made in order to arrive at a satisfactory demonstration that life was extinct. These proofs were named as ten in number, and they were taken up in the following order. 1. Respiratory failure, including absence of visible movements of the chest, absence of respiratory murmur, and absence of watery vapour from the breath; this test was a fallacious one, for apparent movement and murmur might be absent, and the mirror test was useless. 2. Cardiac failure, including absence of arterial pulsation, of cardiac motion, of cardiac sounds, and absence of turgescence, or filling up of the veins on making pressure between them and the heart. The pulse as a sign was of more value than the cardiac motion or sounds, and yet even it might be undetectable, although the body were alive and capable of recovery. He had written a paper some time ago on the maintenance of life when the circulatory apparatus was working at low pressure. An animal under chloroform might pass into this condition, the heart being only partially filled and emptied at each beat, and yet this partial action was sufficient to keep the animal alive, though scarcely any of the signs of life were manifest. This cataleptic, syncopal, or hibernating condition was seen in animals while in a state of suspended animation. The proof by pressure on the veins was one not likely to deceive. A band should be bound round the wrist, a cardboard being arranged in front so as to relieve the arteries from pressure. If life were not extinct, turgescence of the dorsal veins of the hand would soon be apparent. 3. Reduction of the temperature of the body below the natural standard. A diminution of a few degrees did not signify death, as recovery had taken place even after a falling of the temperature to as much as 7° F. below normal. A fallen temperature as a proof of death should always be considered only in combination with others. If the temperature within the mouth were found lower than that of the surrounding atmosphere, it would be a strong presumptive sign of death. 4. Presence of rigor mortis and muscular collapse. Rigor mortis might be imitated by rigidity from cold or by tetanus, but the history would distinguish, and tetanic spasm produced distortion of limbs. 5. Coagulation of blood in the veins. This, when present with rigor mortis, was an absolute sign of death, but both might be absent for even a lengthened period. 6. Presence of putrefactive decomposition. Its presence in the eyeball indicated certain dissolution; but it was not in all animals an invariable sign of death, for frogs had been kept by amyl in a state of suspended animation until the web of the foot had commenced to decompose, and yet the animal had recovered. 7. Absence of red colour in semi-transparent parts under the influence of a powerful light, such as that from a magnesian lamp. 8. Absence of muscular contraction under the stimulus of an electric or galvanic current. The handiest apparatus for this test was a small faradic battery, and needles should be thrust into the muscles of the forearm. 9. Absence of a red blotch under the skin after the subcutaneous injection of ammonia. This test the author looked on as particularly valuable. 10. Absence of signs of rust—oxidation—of a bright steel needle after plunging it deep into the tissues. This test was only of value for a short time after death, as later rust would follow from oxidation of the needle by the acid products of decomposition. In the last part of his paper Dr. Richardson indicated the precise mode in which the practice named should be directly applied, taking up the steps of the necessary examinations one by one, pointing out the relative values of each, and giving, so to speak, in a condensed form, the diagnostic formula for an absolute proof of death in every doubtful case, without any operative procedure that was itself inimical to life. He recommended the practical application of tests in the following order. 1. Apply the fillet to the wrist and examine the veins at the back of the hand. 2. Open a vein at the bend of the elbow and seek for stringy coagula; open, if necessary, two or more veins. 3. Apply the electric test. 4. Inject ammonia hypodermically. 5. Examine by strong light for absence of red colour from the transparent tissues. 6. If any doubt still remained, and rigor mortis had not developed, let the body be kept in a damp room at 84°F.; this would speedily bring about decomposition if the body were dead, and would favour recomposition or restoration if life were not extinct. This last test had the great recommendation that it could be carried out in those cases where it was forbidden to touch the body.

Sir WILLIAM MACCORMAC had followed the paper with the greatest interest, and was particularly struck with the simplicity of the vein-pressure test. Dr. Richardson had mentioned in the course of his remarks that he had been obliged to abandon as uncertain the method of killing dogs by electricity. He was surprised to hear this, as in the new year in another country this method was to be used to put criminals to death.

Dr. C. H. F. ROUTH had observed in persons dying from pneumonia, especially if the disease were double, a remarkable preservation of natural colour. He referred to a case under his care in which, after death following ovariotomy, the temperature went up to 111°, two degrees higher than it was immediately before death. Speaking of post-mortem movements, he referred to the custom at Vienna of placing a bell-rope in the hand of the corpse; the bell had only been rung once, and that was after death from Asiatic cholera. In catalepsy some amount of respiration went on, and the limb, if put in an extraordinary position, remained so; he found that a blow upon the spine brought these patients round. In deaths from lightning, he was under the impression that the electric fluid usually made a mark of entrance and of exit, and that the blood remained fluid.

Dr. ALTHAUS, referring to the repulsive idea of living burial, remarked that it had been said that from thirty to forty persons were so buried in France every year, and this probably often happened in great epidemics. He quoted several instances of narrow escape from this horrible catastrophe, and, having alluded to the value of decomposition and fall of temperature as signs of death, he concluded by advocating electricity as one of the surest tests of the extinction of the vital flame. Muscular excitability he had found was absent in all cases three hours after death.

Dr. RICHARDSON, in reply, said he could never be an advocate of the introduction of electricity for the purposes of capital punishment; it was very liable to error, sometimes producing mere scorching, at others a cataleptic state, from which recovery ensued. The present method of hanging by a long drop was barbarous, and he believed that the old method of suspension was the most humane. In nearly all cases of asphyxia a return to the natural colour took place to a greater or less degree. Sir Spencer Wells had shown him a case where, after ovariotomy, there was a high post-mortem temperature.

Sir WILLIAM MAC CORMAC, in conclusion, related some remarkable cases where, after gunshot wounds on the field of battle, instantaneous cadaveric rigidity had developed. He had seen a man quite dead sitting in the act of drinking; another with his arms up holding a rifle; and Professor Longmore had written a paper giving an explanation of such cases. It was recorded that in the war of the American rebellion a man was shot dead by a long-range bullet whilst in the act of mounting his charger, and he was found rigid with one foot still in the stirrup when the firing party came up to him some time later.

Dr. RICHARDSON thought that in such cases there was a sudden resistance and copious discharge of heat, coagulation at once taking place.

ERRATUM.—In our report of the discussion on Dr. Savage's paper on Puerperal Insanity, read last week at the above Society, the remarks concerning Armstrong's use of calomel in puerperal fever were erroneously attributed to Dr. H. G. Mackenzie, instead of, as they ought to have been, to Dr. F. Lucas Benham.

OBSTETRICAL SOCIETY OF LONDON.

A MEETING of this Society was held on Dec. 5th, Dr. John Williams, President, in the chair.

On the Effect of Glycerine on the Quantity of Secretion poured into the Vagina.—This paper, read by Dr. HERMAN, related observations made to see whether the commonly, but not universally, accepted belief, that the local use of glycerine causes a flow of fluid from the vagina, was correct or not. The observations were made with cotton-wool plugs soaked in glycerine, and with pessaries made of gelatine and glycerine. The amount of glycerine inserted into the vagina was weighed, the discharge from the vagina was weighed, and the amount of vaginal discharge from the same patient when glycerine was not used was also ascertained by weight. The result of the observations was in favour of the following conclusions: (1) That when the secretions poured into the vagina are not abundant, the local use of glycerine increases them; (2) that when the secretions poured into the vagina are already abundant, the local use of glycerine does not increase them.—Dr. CHAMPNEYS asked whether Dr. Herman had estimated the loss on the diapers from evaporation. The conditions were favourable for evaporation, and would confirm the conclusions arrived at in the paper.—Dr. GRIFFITH said that it was important to make sure whether the vaginal secretions were formed in the vagina or were merely retained in that canal. The vagina was anatomically skin, and actually became dry skin in procidentia and cystocele, and then no secretion could be found but what was evidently uterine. Glycerine would then act on the vagina as on any surface skin, irritating it, and, by absorbing the moisture in the surface cells, rendering it more dry than before. In Dr. Klein's opinion, the acidity of vaginal mucus, like that of the sweat, was due to decomposition.—After some observations by Dr. BRAXTON HICKS, Dr. HERMAN, in reply, stated that he thought the loss of weight by the diapers or pads due to evaporation was but slight. On the other hand, the perspiration from the skin with which the diaper was in contact might cause a slight increase in weight. He had used the words "secretions poured into the vagina," which did not imply any opinion as to their source. Whether the secretion was of uterine or vaginal origin, whether it was produced by glandular activity or simple osmosis, he could not tell. He would be obliged if Dr. Griffith could suggest any method, harmless to the patient, by which the secretions of the uterus could be separated from those of the vagina. Dr. Herman believed that the vagina did secrete mucus. In cases of atresia of the vagina, at more than one place collections of mucous fluid were found between the occlusions. In cases of atresia of the os externum, the vagina was as moist as in most other patients. That under pathological conditions the vagina might pour out fluid in abundance needed no demonstration.

Obliteration of the Central Canal of the Spinal Cord in an early Human Embryo.—This paper was read by Mr. C. B. LOCKWOOD. After a description of the microscopical specimens which illustrated the author's researches, Mr. Lockwood gave reasons why he believed that the appearances were not due to decomposition or soakage. They represented a fault in the process of development. The obliteration of the central canal was confined, in this case, to the dorsal region of the cord. This obliteration appeared to be in some respects an excess of the process of development, in others a retardation of that process. Mr. Lockwood attributed most abnormalities to disease, especially inflammatory processes. The epiblast, from which the dorsal portion of the spinal cord was developed, was particularly exposed to external influences. It lay next the uterine surface for some days in early fœtal life, when the cord was unprotected by the amniotic folds. Gynæcologists could imagine conditions of the uterine surface which might exercise a pernicious influence on the epiblast. Early embryonic defects and diseases of the cord may be frequent, and may account for a variety of well-known affections, such as congenital defects of joints, club-foot, and syringo-myelocele.—Mr. DORAN concluded that the same defects and diseases would account for anencephalous monsters. Acephalous or acardiac monsters were developed in quite another manner—namely, through abnormal vascular communication between twins.—Mr. LOCKWOOD thought that defects in the epiblast partly accounted for anencephalus.

Sequel to a Case of Bright's Disease during Pregnancy.—Dr. HERMAN'S original report of the case was published in the twenty-ninth volume of the Society's Transactions. The patient, aged twenty-one, had labour induced at about the seventh month on April 18th, 1887. Symptoms of Bright's disease had apparently been present for about two months. She left the hospital about three weeks after delivery. Dr. Herman now reported the termination of the case. The symptoms became worse after her discharge, and she died from acute œdema of the larynx and tongue in St. George's Hospital on Jan. 26th, 1888. The report of the necropsy, prepared by Dr. Penrose, was read. There was no œdema of the feet, the superficial veins of the thorax were distended, and there was generally fulness of the neck; the local disease about the larynx was very marked. The brain tissue was firm; there was no excess of fluid in the ventricles. There were retinal hæmorrhages. The great serous cavities contained a small quantity of fluid. The lungs were œdematous; the left ventricle greatly hypertrophied. The aorta was but little atheromatous. The kidneys were granular, the cortex readily peeling; their weight was 9 oz. The liver was large and fatty, weighing 4 lb. 4 oz. The spleen was large and firm, weighing 7 oz.; it contained a small infarct. Dr. Herman noted the rapid production, at a very early age, of granular kidney and the associated cardio-vascular changes.

Extra-uterine Fœtation; Abdominal Section eight months after Death of Fœtus; Sac formed by Left Fallopian Tube and Left Broad Ligament; Recovery.—This paper was read by Dr. CULLINGWORTH, and specimens of the fœtus, placenta, and a portion of the cyst wall were exhibited in illustration. The patient was twenty-seven years old. Her last confinement happened five years ago. In April, 1887, she menstruated for the last time. In July she quickened and continued to enlarge and feel the movements of the fœtus till December, when she suffered for an hour with labour pains. Then the movements ceased and the abdomen decreased in size. Seven months later she was admitted into hospital. An abdominal tumour lay behind the uterus. An eight months' fœtus was found in a sac composed of the left Fallopian tube and broad ligament.

The liquor amnii and umbilical cord had disappeared. The placenta lay in front and was removed without hæmorrhage. The fœtus was firmly adherent to the sac wall. A portion of the sac was removed, the remainder being stitched to the abdominal wound and drained. The sac closed in well; a small piece near the incision sloughed. The patient made an uninterrupted and aseptic recovery, the temperature during convalescence never exceeding 100·4°.—After some observations by Mr. SUTTON, Dr. GRIFFITH asked if the fœtal sac had been found in this case to be in the broad ligament or not. Mr. Tait believed that no extra-uterine pregnancy ever advanced near to term, save when the sac was sub-peritoneal. A specimen in the museum of St. Bartholomew's Hospital almost disproved this theory. Dr. Griffith further asked if Dr. Cullingworth found any advantage in the median incision and the opening of the peritoneal cavity, as it had been shown by Mr. Thornton and others that it was usually better to cut down directly on the sac, and to avoid opening the peritoneum.—Dr. HERMAN noted that in this case the placenta resembled the same structure in cases of extra-uterine gestation removed some time after the death of the child, which had been exhibited before the Society by Dr. Champneys, Dr. Aust Lawrence, Mr. Thornton, Mr. Doran, and himself. Effusion of blood, which partially organised, made it more solid. Great diminution in the activity of the circulation in contiguous maternal structures occurred, so that the placenta could be detached and removed with trifling, if any, hæmorrhage. Hence the slight risk which attended secondary operations. It would be well if we could determine the date at which the changes in the placenta occurred. Litzmann had endeavoured to find out the date at which the maternal circulation might be expected to have ceased, but concluded that it could not be ascertained with certainty. He fully believed that intra-peritoneal as well as sub-peritoneal pregnancy might proceed nearly or quite up to term. He had operated on one such case himself; the placenta was attached to the bladder and anterior abdominal wall.—Dr. CHAMPNEYS said that the statement that all cases of extra-uterine gestation which went quite or nearly to term were intra-ligamentous was unfounded. In his own case, described in the Society's Transactions for 1887, the fœtus was simply free, kicking about among the bowels. Furious hæmorrhage had occurred, according to Litzmann's statement, from the placental side, four months after the death of the child.—Dr. GALABIN asked for the relations of the mass felt behind the uterus. Had the peritoneum been stripped off the back of the uterus by the expanding sac? There was positive evidence that abdominal as well as intra-ligamentous pregnancy might go on to term, or nearly to term. In the case of combined extra-uterine and intra-uterine fœtation in which he had operated, the fœtus was enclosed only in its own thin membranes, and the placenta was attached to the pouch of Douglas and the back of the uterus.—Dr. WILLIAM DUNCAN thought that very many cases of rupture were between the layers of the broad ligament, and not into the peritoneal cavity. He had operated on such a case.—Dr. PLAYFAIR approved of Dr. Cullingworth's practice. At the time that the patient was seen by him no other resource but secondary laparotomy was possible, and it had happily proved successful. On the other hand, Dr. Harris's tables of cases of primary operation (before the death of the child) showed a most gratifying success. With increased experience still better results would be obtained. Dr. Playfair noted the great differences in the state of the fœtus when retained after term. In Dr. Cullingworth's case it was fresh and unchanged, though retained for six months. In the case preserved in the museum of the College of Surgeons, where the fœtus had been retained about fifty years, it was also fresh. Yet he had seen a fœtus transformed, after only a few months' retention, to a mass of adipocere and bone. In older cases it sometimes became mummified or ossified, forming a "lithopædion." Rupture of the tube early in gestation, as in Dr. Cullingworth's case, was by no means necessarily fatal, and often led to the development of an abdominal gestation. He related the case of a lady who was suddenly taken very ill in the street. He was called in to see her, and diagnosed ruptured tubal pregnancy, Dr. Matthews Duncan confirming the diagnosis. Laparotomy was decided upon. The patient, however, rallied completely before the necessary preparations for the operation were made. She left England, but Dr. Playfair had learnt that an abdominal tumour had since developed, and that Dr. Breisky, of Vienna, was about to perform laparotomy.—Dr. CULLINGWORTH, in reply, gave reasons for feeling sure that the pregnancy was originally tubal, and had become a broad ligament gestation through rupture of the tube. Operation without opening the peritoneum would have been impossible, owing to the relations of the parts. The cessation of placental circulation had proved most favourable for the operation. Irregular hæmorrhages in the early months of pregnancy, a great aid to diagnosis, had not been observed in this case; no decidua had been expelled. Since the paper was written more ligatures had come away, and the wound had closed. Dr. Playfair's observations on the fate of the fœtus were interesting. When suppuration and graver symptoms occurred, perhaps the fœtus had become adherent to the intestine, septic changes ensuing. He was glad that the President was in accord with him as to the desirability of operating without waiting for symptoms. A patient going about with a dead fœtus in her abdomen was in constant danger. An operation was most likely to be successful when performed before septic symptoms had set in.

CAMBRIDGE MEDICAL SOCIETY.

AT the meeting on Nov. 2nd, Mr. Stear, M.R.C.S., President, in the chair, the following communications were made:—

Valvular Disease of the Heart resulting from Overstrain.—Professor ROY, F.R.S., and Mr. ADAMI, M.R.C.S., gave a communication upon "Valve Disease of the Heart resulting from Overstrain." Having investigated the causes and influences of the work of the heart under physiological conditions, they produced artificial overwork and overstrain by a variety of methods. The work of the heart, they showed, can be most conveniently and accurately considered as resulting from the combined influence of two factors—namely, the pressure against which the heart has to contract, and the quantity of blood thrown out in a given time; the value of these two factors multiplied together giving the work done, stated in the form of mechanical units. The first element—the pressure—they increased by narrowing the aorta, the increase in pressure within the heart thereby produced being measured by an accurate "pressure gauge," exhibited at this meeting. It was found that the degree to which the systolic pressure within the ventricle could be raised as the result of such aortic stenosis varied with different animals and with the nutrition of the heart at the time of the experiment. In the dog the maximum intraventricular pressure on the left side producible in this way is usually that of some 250 or 300 millimetres of mercury, the normal systolic pressure being something under 120 to 130 mm. Hg. When overstrain of the heart is thus produced, both ventricles become greatly distended; and when the narrowing becomes extreme, a wave of regurgitation may be seen running outwards from the heart at each systole along the systemic veins. On killing the animal after an experiment of this nature, the valves are found to present certain changes. These consist in either œdema or ecchymoses, with or without roughening of the surface of the flaps. In the mitral valve (which is most usually affected), these changes are most marked at, and indeed as a rule are confined to, the free margin of the flaps, which come in contact during closure of the valves. In the aorta (which next to the mitral is most frequently implicated), the change is of the nature of an œdematous thickening at the insertion of the flaps into the aortic wall. Before discussing the nature of these changes and their bearing upon valve disease in man, the authors gave an account of some of the results obtained from an investigation of the second factor which influences the work of the heart—viz., the quantity of blood passing through it. This subject has received but little attention from physiologists, owing to the want of a satisfactory method of investigating the amount of blood which enters and leaves the heart in a given time. The authors employed a new instrument, which permits the volume of blood passing through the heart being accurately and conveniently measured. By means of this "cardiometer," as the authors have named their apparatus, it was found that unexpectedly wide variations of the work done by the heart result from changes in the amount of blood entering it. It was shown that the results thus obtained are of a kind fitted to explain a variety of hitherto obscure problems of physiology and pathology of the circulation. There has been an animated discussion as to whether the

heart valves in the normal state are supplied by bloodvessels. In the healthy valves of an adult dog, the author's observations have conclusively convinced them that vessels in the form of capillary loops are present only along the line of insertion of the valves, the greater portion therefore of the flaps, as also the chordæ tendinæ, being without vascular supply. Presumably, the discrepancies in the result obtained by various investigators depend upon the fact that in cases where the valves are thickened—a much more frequent occurrence both in man and in dog than is generally supposed—bloodvessels are present. The nutrition of the valves therefore in health is largely dependent upon the lymphatics. The epithelium covering the valves is composed of two kinds of cells. By far the greater part of the cellular lining consists of the ordinary flat cells with more or less wavy outline, forming the "endothelium" of the vascular system in general. These differ in size at different parts of the valves, and between them are to be seen "pseudostomata" in various numbers, with different hearts and in different parts of the valve surface. But besides these, there are found on the surface of the normal valves a number of more granular cells, staining much more deeply with silver than the ordinary ones. These granular cells, as a rule, resemble the latter in outline, although sometimes they are smaller. They frequently show apertures, either in their substance or between their margin and the adjacent black line, marking the edge of the neighbouring cells. These cells evidently correspond to those which have been described by Ranvier and others as being situated at openings through the endothelial layer into the subjacent lymph-canalicular system. They have been called "germinating cells" by Klein, on the assumption that they are endothelial cells which are undergoing proliferation. The term "germinating cells," however applicable in the conditions under which Klein observed these cells, is not a suitable one for the granular cells described by the authors as found by them in the covering of normal valves, seeing that in this situation they show no evidence that they are undergoing proliferation. There can be no doubt, however, that in the valves, as in the case of other membranes where they have been described, they are situated at openings into the underlying lymph-canalicular network. By their power of contraction and expansion, they may be reasonably supposed to influence the quantity, and possibly the quality, of the fluid which passes them by the pseudostomata to carry on the nutrition of the valves. The authors had no hesitation in concluding that the new formation of fibrous tissue in the valves of the heart as a result of overstrain, and which is the commonest cause of stenosis of the mitral and aortic orifices, ought not to be called chronic interstitial endocarditis, and would suggest the designation "valvular pachynsis,"[1] as being a less misleading name, and one which in any case avoids expressing any theory as to the nature of the anatomical changes. In conclusion, it was pointed out how well the facts and conclusions detailed in this communication fitted in with what is known as to the etiology and morbid anatomy of so-called chronic interstitial endocarditis. As illustrations of this, they referred to Goodhart's analysis of cases of this condition occurring in the course of chronic renal disease. As might, *à priori*, be anticipated, such cases showed that overstrain of the heart in the young is much more readily the cause of great thickening of the valves, with contraction, resulting in stenosis, than is found to be the case with old people.

Perforating Ulcer of the Duodenum.—Dr. BRADBURY showed this specimen, taken from a servant girl, aged twenty, who died a few hours after admission to the hospital. The previous history showed symptoms of anæmia, and a week before death pain after food. There was vomiting on the morning of admission, and constipation, for which castor oil had been taken. Symptoms of perforation occurred in the night, and she died in the early morning. The necropsy revealed a typical punched-out ulcer on the anterior surface of the duodenum half an inch from the pylorus.

Sarcoma of the Uterus.—Mr. GRIFFITHS exhibited this specimen. It involved the uterine mucous membrane and the inner parts of the muscular wall of the body of the uterus, and had extended a short distance along the interior of the right Fallopian tube.

[1] The authors suggest this word "pachynsis" (which implies coarseness of texture as well as thickening) as being well fitted to characterise the condition of the valves and chordæ tendinæ of the heart due to the development in them of low forms of connective tissue, and which has resulted from overstrain.

LEEDS AND WEST-RIDING MEDICO-CHIRURGICAL SOCIETY.

ON Nov. 16th a special meeting of the Society was held for the exhibition of cases of clinical interest.

Mr. JESSOP showed the following cases:—1. A man upon whom he had performed an exploratory laparotomy for Renal Tumour, which it was found impracticable to remove. 2. A child from whom he had removed a large Malignant Tumour of the Right Kidney, by a combination of Langenbuch's incision with the transperitoneal method. 3. A man suffering from advanced Malignant Disease of the rectum, who had undergone a left lumbar colectomy for the purpose of completely arresting the passage of fæcal material into the lower part of the intestine. 4. A woman who had had cholecystotomy performed for the removal of Gall Stones, which had caused severe symptoms over a number of years. Mr. Jessop remarked that the not unfrequent partial failure of ordinary lumbar colotomy to afford relief usually arose from the fact that no eperon or other barrier to the passage of fæces was formed, and the patient was subject to all his former distresses, plus a lumbar fistula. In this case he had made a complete section of the bowel, brought the upper opening to the surface, and closed the lower by inversion and suture. The patient had previously been subjected to colotomy, which had failed in the way above described.

Mr. ATKINSON showed: 1. A case of External Urethrotomy, with immediate suture of the wound. 2. A case of Cancrum Oris. Mr. Atkinson referred to Mr. Marmaduke Sheild's method of suture in separate layers of tissue, and said that in the case shown he had stitched the urethra and the external wound by four deep sutures. A silver catheter was retained for twenty-four hours, and afterwards passed at intervals of three days. There was a little leakage at the end of the first day; none subsequently.

Mr. R. N. HARTLEY showed a case of Innominate Aneurysm for which distal ligature of the common carotid and subclavian artery was performed three years and a half ago. Mr. Hartley said that since he previously exhibited the patient (about two years ago) the tumour had shrunk and become firmer, and had almost disappeared, except for a slight prominence of the manubrium sterni and the inner end of the clavicle. About six months ago, without any very obvious exciting cause, the aneurysmal swelling began to enlarge again, at first without any symptoms except a slight cough, but latterly there had been diffuse pains about the shoulder. At present the aneurysm has extended largely upwards in front of the neck, and the sternal end of the clavicle seems amalgamated with and almost lost in the walls of the sac. There are no signs of thoracic extension. There is very marked pulsation of the enlarged anastomosing vessels about the shoulder, and the radial pulse is quite distinct. In view of the comfortable condition of the patient he invited opinions as to the value and advisability of galvano-puncture, feeling reluctant to undertake further interference.—In answer to Dr. WARDROP GRIFFITH, who made some remarks upon the difference in the circulation through aneurysms after proximal ligature by the methods of Anel and Hunter respectively, Mr. JESSOP said that, while he admitted that aneurysms occasionally undergo consolidation by the gradual deposition of laminated clot, yet he thought that the usual process was by sudden coagulation throughout the mass of contained blood. He had on one occasion observed sudden consolidation and arrest of pulsation while he was examining an aneurysm; and he mentioned another case in which amputation had been performed for gangrene after ligature, and where the sac was found to be lined by a thin layer of laminated clot of old duration, the cavity being filled by a mass of soft coagulum.—Mr. WARD mentioned a case which he had taken charge of shortly after Mr. Jessop had tied the right carotid and subclavian for aneurysm at the root of the neck. At the end of a month there was severe secondary hæmorrhage, for which he had tied the carotid at a higher point. The hæmorrhage recurred on two subsequent occasions, and was treated by galvano-puncture, the second application setting up severe inflammation of the sac, with escape of a considerable quantity of tarry blood. The aneurysm subsequently consolidated, and the patient lived for two years in comfort and comparative activity. At the end of that time he was seized with acute prostatic retention, followed by severe hæmorrhagic cystitis, with high

temperature and symptoms of septicæmia. With the supervention of pyrexia and violent cardio-vascular disturbance, the aneurysm began to pulsate and enlarge, became diffused, and the patient died cyanotic and comatose in a few days.

Dr. WARDROP GRIFFITH showed a case of Charcot's Disease, involving both knee joints. The patient had sudden pains lasting about a minute, myosis with Argyll-Robertson pupil symptom, absence of patella jerks, and incontinence of urine. There was creaking in some of the smaller joints, and a history of effusion into the right knee, which was tapped.—Dr. CHURTON had seen a similar case in which the joint was swollen and painful. He thought the invasion of Clarke's column of the cord determined the joint affection in locomotor ataxy.—Mr. LAWFORD KNAGGS thought the involving of the other joints, the rheumatic history, and the character of the pain rendered it more probable that the joint affection was osteo-arthritic in character.

Mr. MAYO ROBSON showed: 1. A case of Goitre which had produced dyspnœa for three years, owing to pressure on the trachea. Division of the isthmus by the galvanic écraseur was performed ten months ago. The circumference of the neck had since diminished from seventeen inches and a half to fourteen inches and a half, and the breathing had become quite comfortable. 2. Ununited Fracture of the Olecranon, treated by wiring the refreshed ends of the bones. Subsequent good union. 3. Psoas Abscess, due to caries of lumbar spine, treated by aspiration and injection of a solution of iodoform in ether. There had been four aspirations—eight ounces, six ounces, three ounces, and two ounces of pus having been removed, and about two drachms of a saturated ethereal solution of iodoform injected each time. Since the last aspiration, four months ago, there had been no return of pus, and the spine was being treated by a plaster jacket. 4. Suprapubic Lithotomy in a boy aged thirteen, where the bladder had been sutured and immediately returned. Mr. Robson had had four cases where immediate suture had succeeded in young subjects. 5. Sigmoidotomy for Stricture and Ulceration of the Rectum, performed by Mr. Allingham's method. The case showed the double-barrelled arrangement of the opening, which prevented the fæces passing below the aperture.

NORTHUMBERLAND AND DURHAM MEDICAL SOCIETY.

A MEETING of this Society was held on Thursday, Nov. 8th, Dr. James Murphy, President, in the chair.

Anterior Colotomy.—Dr. ARNISON showed two men on whom this operation had been performed. He demonstrated the upper and lower openings in the colon, and showed the copper pad by which the patient could control the escape of fæces.—Remarks were made by Drs. Drummond and Galloway, and Mr. Jessop of Leeds.

Suprapubic Lithotomy.—Mr. PAGE showed a boy, aged eight years, on whom he had operated. The unsutured wound in the bladder united by first intention, without the escape of a single drop of urine from the wound.

Closure of Jaws successfully treated by Excision of a Condyle.—Mr. PAGE'S patient was a girl aged nine years. When two years old she had an attack of measles, followed by profuse and prolonged discharge from the right ear. Within six months there was gradual closure of the mouth, and for six years the jaw had been fixed. Mr. Page cut down on the right temporo-maxillary joint, and found the condyle absorbed and welded to the skull. The bone was removed by chisel and mallet. The girl now opens her mouth widely. Mr. Page also showed a boy on whom he had performed the same operation with a similar result about two years ago.

Alcoholic Paralysis.—Dr. J. DRUMMOND showed a man who had almost recovered from this affection. There had been more or less loss of power and sensation in the arms and legs, with affection of the reflexes and electrical reactions. There was a history of great alcoholic excess, and marked cardiac lesions were present.—Drs. Philipson, Gowans, D. Drummond, and Embleton joined in the discussion which followed.

Pathological Specimens.—Dr. HUME showed: 1. Flat oxalate of lime calculus, weighing 3 oz., removed by the suprapubic method from a patient with enlarged prostate; rapid recovery. 2. Tumour of testis from a man of thirty. It was a spindle-celled sarcoma, with large nodules of cartilage. 3. Sarcoma, with large blood cyst, removed from Scarpa's triangle.—Mr. JESSOP showed: 1. Calculus removed from bladder by suprapubic method. Symptoms had been present for many years. 2. Uric acid calculus, which had been present eight years. 3. Thirteen small stones removed from a case by suprapubic method, a prostatic enlargement being removed at the same time. 4. Renal calculus, weighing 11 oz., removed by nephrotomy. Symptoms had been present only six months. A large abscess formed round it. The cast had the shape of the expanded pelvis and calyces. The man made an excellent recovery, but a small fistula remained. 5. Gall stones from three cases in which the gall bladder had been opened. In one case the stone was removed from a point about the commencement of the common bile duct.—Mr. Heath, Dr. Hume, Mr. Page, and the President took part in the discussion on these cases.

Dr. HEATH showed Concretions removed from the Bladder by the median incision in a case of Old-standing Cystitis; also a Periosteal Sarcoma of the Femur from a case where he had divided the femur below the trochanters and then dissected out the head of the bone.

Dr. LIMONT showed Casts from a case of Plastic Bronchitis. The patient was a sailor, aged thirty-six; acute febrile symptoms were present; numerous casts were coughed up; but the patient died of asphyxia. At the necropsy the trachea and large and small bronchi were found lined by a fibrinous deposit, slightly laminated. Dr. Limont also showed a marked example of "Button-hole" Mitral.

Mr. RUTHERFORD MORISON showed a Fibroid Tumour, removed with part of the uterus. The tumour had been regarded as a cystic ovary. It was adherent to the uterus, and the latter was secured by Keith's clamp and divided. The patient died on the sixth day. There was no peritonitis, but there were fœtid purulent clots in the uterine veins, and no doubt the patient died of pyæmia.

The following papers were held as read:—Mr. Page: Operative Treatment of Closure of Jaws. Dr. Geo. Taylor: Cervical Hæmatomyelia. Dr. W. Robertson: Nasal Obstruction. Dr. D. Drummond: Lessons from the Post-mortem Room.

On the motion of the President, seconded by Mr. Heath, Mr. Jessop was elected an honorary member of the Society, and was also given a cordial vote of thanks for his valuable demonstration.

YORKSHIRE ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

The case of Dr. Lloyd Roberts.—Vaccination.

THE quarterly meeting of the members of this Association was held at Pontefract on the 30th ult., the President, Dr. Britton, in the chair.

Dr. HIME proposed a resolution expressing warm sympathy with Dr. Lloyd Roberts, the late medical officer of health for Ruthin, on the manner in which he was deprived of his office by the local board of that district.

Dr. DEVILLE (Harrogate) seconded the motion.

The PRESIDENT thought the case was of such a character that the Association might depart from its practice of not interfering with any steps taken by sanitary authorities with regard to their officials.

After discussion the resolution was adopted.

Dr. DEVILLE proposed: "That this meeting is satisfied that the practice whereby medical officers are almost universally appointed for a limited period is contrary to the best interests of the public, and has proved a source of great hardship to the medical officers of health, and consequently respectfully urges upon the Local Government Board the importance of promoting such legislation as will ensure the medical officers of health security of tenure of their office so long as they discharge their duties satisfactorily."

Dr. WADE (Wakefield) seconded the motion.

The PRESIDENT said the Local Government Board was a myth. If they altered the resolution so as to urge the matter on the Legislature, then he should be hopeful of something being done. The Local Government Board meddled and muddled, but never did anything.

Dr. NORTH and Dr. WILSON (the secretary) disagreed with the remarks of the President, the former gentleman holding that the Local Government Board had been of great advantage to the country.

The resolution was unanimously adopted.

Dr. A. BUNCLE (Pontefract) read a paper on Vaccination, Public and Private.

Dr. BURMAN (Wath), in a paper having reference to a recent outbreak of small-pox in his district, said his forty years' experience might be summed up as follows. 1. That primary vaccination in infancy is an almost perfect protection against small-pox during the first ten or twelve years of life. 2. A second vaccination is a complete protection for the remainder of life. 3. He had not known an unvaccinated person escape the disease if in a house where it was, unless he had previously suffered from the disease, and not always then. 4. He had not known a fatal case of small-pox after vaccination, and had scarcely ever seen a permanent mark left in such a case.

Notices of Books.

A Treatise on Dislocations. By LEWIS A. STIMSON, B.A., M.D., Professor of Clinical Surgery in the University of the City of New York, Surgeon to the New York, Presbyterian, and Bellevue Hospitals, &c. With 163 Illustrations. London: J. & A. Churchill. 1888.—Dr. Stimson is well known in this country, and his work on fractures is justly held in high repute. This companion treatise on dislocations is calculated to increase his good reputation. It is obviously the outcome of much hard work, carefully carried out, and it has been made as thorough and complete as practicable. Dr. Stimson has of course had an immense mass of material to deal with, especially as he has, so far as possible, gone back to original descriptions of cases, and one of his chief difficulties has been the sifting of the wheat from the chaff, the selection of sound accurate observations from careless and incorrect descriptions. One special feature, which will render the work of great use to others engaged in researches on dislocations, is the very careful and accurate bibliography. The book cannot of course be classed among text-books—it is far too elaborate for that; but it will be greatly valued by a smaller circle of readers, and by all who desire to know thoroughly the results of a careful study of the literature on this branch of surgery.

A Criticism of the Development Hypothesis. By JULIUS H. SEELYE, D.D., LL.D., President of Amherst College.—This is a very good statement of the main objections that can be raised against the Darwinian theory in the compass of twenty pages. It is divided into two parts—Facts and Principles. The Facts succinctly given are these:—No transmutation of species has ever yet been observed; the geological record gives no evidence of transmutation of species, and, so far as it can be read, simple organisms are persistent, whilst highly complex organisms, presumably better fitted to maintain the struggle for existence, have died out; natural selection cannot account for the changes which it is assumed to produce—as, for example, the production of mammary glands; the law of hybridity contradicts the hypothesis; lastly, gradation should not be confounded with progress, and does not imply a development. The Principles discuss the Author and Ruler of nature, design in nature, and species in nature. The objections that are urged have all been admitted and discussed by Darwin himself, but it is well to have them clearly put by an able writer, for it is certain the last word has not yet been said on the "Origin of Species." The pamphlet is stated to have been specially written for "Johnson's Universal Cyclopædia" and "Johnson's Natural History."

Vorlesungen über Akiurgie. Von Dr. BERNHARD VON LANGENBECK, weiland Wirkl. Geh. Rath und Professor. Mit Benutzung Hinterlassener Manuscripte. Herausgegeben von Dr. TH. GLUCK, Professor der Chirurgie in Berlin. Berlin: Hirschwald.—If any memorial of the great German surgeon were needed to perpetuate his memory, probably none could be better than this bulky volume which now lies before us. Langenbeck was undoubtedly a great surgeon, and he has left his mark on many departments of scientific work. But his "bent" lay especially in the direction of operative surgery, and by far the most numerous of his many publications were descriptions and criticisms of new methods of operating. As an operator he was exceedingly calm and self-possessed, and showed no agitation while performing the most hazardous operations. In early days he was a pupil of Astley Cooper; and, brought up amid the traditions of that great school of surgery, he witnessed the two great surgical revolutions—the anæsthetic and the antiseptic. The lectures which Dr. Gluck has edited are chiefly of value as being the outcome of the very large and ripe experience of a great operator.

Medical and Surgical Directory of the United States. R. L. Polk and Co., New York.—Through the courtesy of Messrs. J. B. Lippincott and Co., Philadelphia, we have been favoured with a copy of the first edition of this extensive and valuable work. The volume, which contains over 1400 pages, contains a list of physicians and surgeons arranged by States, with school practised, post-office address, population and location, date and college of graduation, all the existing and extinct medical colleges in the United States and Canada, a synopsis of the laws of registration, a descriptive sketch of each state and territory, statistics, an account of all the best known mineral springs, and full particulars of all national associations and societies relating to medicine and surgery. Considering the number of names and mass of information contained in the volume, its compilation must have been a work of immense labour. Those responsible for its appearance are, however, to be congratulated on the success they have achieved in producing a Directory which, while naturally of paramount utility in the New World, is yet of very great value in the Old.

Mediterranean Winter Resorts. A Practical Handbook to the Principal Health and Pleasure Resorts on the Shores of the Mediterranean. By E. A. REYNOLDS BALL. With 27 Illustrations. Pp. 237. London: L. Upcott Gill. 1888.—This is intended as a guide-book for the large class of persons who desire to winter in a more genial climate than we enjoy in England. It therefore does not contain much information specially adapted for professional readers, although it gives a fair general account of the climate of the various health resorts. The details respecting the means of reaching these, the accommodation to be found at them, the expense of living, and the various kinds of occupation and amusement available at them will doubtless be found useful by those who are in search of a desirable winter abode. In addition to the Mediterranean resorts a full account is given of Cairo, which enjoys the advantage of a very dry winter, with the drawbacks of a great range of temperature, and the reputation of being the most expensive Mediterranean (?) winter station for invalids.

The Perfect Clinical Chart.—Messrs. Danielsson and Co., who have done much to facilitate the graphic record of clinical notes, send us a clinical chart, which has been devised by Dr. R. G. Pattèson. It does not materially differ from most similar charts in vogue, the chief additions being the introduction of columns for noting the condition of the tongue, bowels, skin, &c. The small amount of space necessarily allotted to these points will, we fear, detract from the utility of the chart, which in other respects is very well fitted for its purpose. The same firm have added to their series of clinical figures some well-executed diagrams for recording ophthalmoscopic, rhinoscopic, and laryngoscopic observations.

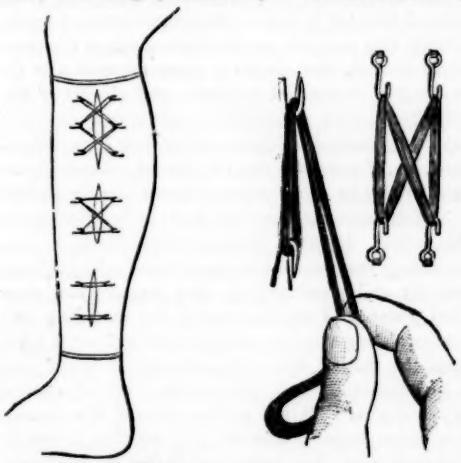
Smith's Physicians and Surgeons' Visiting List, Diary, Almanack, and Book of Engagements for 1889. Forty-third year. London: Hazell, Watson, and Viney.—This well-known and much-used Visiting List again presents itself for notice. It has served the profession for forty-three years, and seems quite likely to hold its ground. It is beautifully got up, and contains the usual list of useful tables of reference.

The A B C Medical Diary and Visiting List, with which is combined the A B C Materia Medica. Published by Burroughs, Wellcome & Co., Snow-hill Buildings, London.—This is a book similar in kind to the above, with the addition of brief notes of modern preparations, which cannot fail of being useful to medical men engaged in general practice.

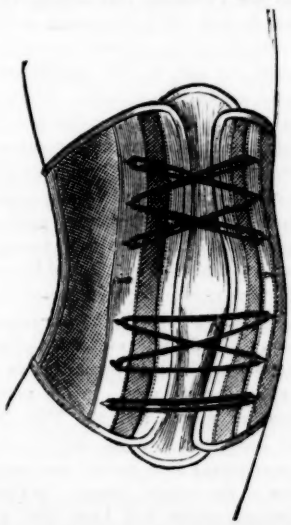
New Inventions.

MATTHEWS' PATENT IMPROVEMENTS IN SURGICAL BANDAGES.

THESE improvements suggested themselves to a patient in his endeavour to obtain a firm support for the knee joint in a case of synovitis. Their object is to enable firm pressure to be directed to a given place, and increased or decreased at will, with a certain amount of elastic resilience and flexibility, a result not thoroughly attained by the numerous knee-caps



tried. It was found that the leather knee-cap simply kept the knee stiff, and could not be bound tightly enough (with-



out interfering with the circulation and the action of the hamstrings) to give the requisite support and pressure immediately under and by the sides of the patella. With the elastic knee-cap the pressure was equal all round the joint, and could be increased at the front or wherever required. It is considered that the knee-cap here figured meets the difficulty, combining the advantages of a stiff knee-cap with the power of applying localised elastic pressure. This is done by the arrangement of some flat blunt hooks, and a few ordinary pieces of elastic attached. By this simple contrivance many of the shortcomings inherent to the elastic knee-caps in ordinary use have been overcome. The woodcuts show how this is attained. It has been found to work well in actual practice, and will doubtless meet a long-felt want. The principle itself, of localising the pressure, is applied to other appliances besides the knee-cap, such as belts, stockings, and thigh pieces. In a case of varicose veins the pressure can be directed and limited to the vein itself, if this should be required.

"PROTECTION OF THE MEDICAL PROFESSION."

To the Editors of THE LANCET.

SIRS,—Among the many suggestions for ameliorating the condition of the general practitioner that have appeared in your columns, there is room for one which appears to have been overlooked. It is simply the compulsory registration of all who are engaged in practice. There are undoubtedly some actually qualified men who, for reasons of their own, prefer being unregistered, and this fact is in itself a grievance and an injury to the profession. In my own experience a qualified man who practises in the neighbouring town employs an unqualified assistant, at a distance of eight miles and more from his own residence. I laid the matter before the Medical Council some time ago, but they inform me that the person is not on the Register, and therefore they cannot interfere. So a signal act of wrong is perpetrated with impunity, because the perpetrator shirks the responsibility of being registered. I would suggest that the profession should get a short Act of Parliament passed to remedy this state of things. It will require funds for employing a parliamentary solicitor to draw the Act, and the interest of one or two independent members to introduce it; this need be no hindrance. A central committee in London could carry out the business, and a fund could be started, to which I, for one, should be happy to subscribe. The main point is to enforce the compulsory registration of every practising member of the profession under a penalty of £20 for each conviction, half of which might go to the informer. By this means a good deal of what is actually illegal practice would be stamped out, and a regular, registered, and therefore responsible, body of practitioners would be the result.

I am, Sirs, yours obediently,

Dec. 9th, 1888. A DOCTOR OF MEDICINE.

TREATMENT OF FRACTURE OF THE BASE.

To the Editors of THE LANCET.

SIRS,—It is with some surprise that I have read Mr. Lawson Tait's remarks upon the last Fellowship examination so far as they apply to treatment of fracture of the base. As a house surgeon, I should imagine that by those under whose care these cases usually first come it is now fairly generally understood that the treatment of fracture of the base differs in no particular from compound fracture in any other part of the body, except in so far that from position it is somewhat harder to apply the strictly antiseptic method. I am sure that in my experience success in the result of compound fractures has been in exact proportion to the completeness with which the true antiseptic treatment has been carried out; and I certainly think that, speaking generally, septic meningitis is preventable by somewhat similar means, as by keeping the external meatus surgically clean and the nose and mouth as much so as possible, and by receiving the discharges, at least from the meatus, into some material which will prevent their decomposition. I am, Sirs, yours truly,

HENRY TONKS, F.R.C.S. Eng.,
Senior Resident Medical Officer.

Royal Free Hospital, W.C., Dec. 9th, 1888.

THE LANCET.

LONDON: SATURDAY, DECEMBER 15, 1888.

THE decisive action taken at last by the Medical Council in the matter of registered practitioners "covering" unqualified assistants will bring the whole subject vividly and practically before the profession. It is of great moment that this matter should be thoroughly understood, especially in England and Wales. The revelations of the scale on which it is practised in England and Wales have been a source of surprise to Scotch and Irish practitioners, in whose division of the kingdom it does not seem to exist to any noticeable extent. It is difficult to obtain exact facts as to the proportions of this evil in England. Those who are interested in the question should read "A Statement in 1883, founded on Documentary Evidence which was laid before the Committee on Employment of Unqualified Assistants by Registered Practitioners, presented by the Chairman, Dr. T. KING CHAMBERS." The writer quotes from a medical contemporary to the effect that there are 3000 unqualified assistants in England and Wales. In one town (Halifax), shortly prior to this period, there had been no less than sixteen unqualified assistants, which number had been reduced to seven. In Manchester, according to this authority, "about 30 per cent. of the practitioners kept unqualified assistants of some kind; about 8 per cent. qualified. In the towns round Manchester, with large working populations, the number of unqualified assistants was greater still." So much for the scale o the evil.

Our readers are aware that the Medical Council has no control over unqualified assistants or any other unqualified practitioners; the only way in which the Council has any responsibility for the existence of such an evil is that it has responsibilities for the good conduct of registered practitioners, and power of punishment in cases where such practitioners are guilty of disgraceful or, to use the strong word of the Act, "infamous conduct in a professional respect." Nobody can accuse the Medical Council of being eager to bring accusations lightly against those on the Register. It could much more easily be maintained that the Council has been slow to discharge its duty under the penal clauses, and especially so in regard to the particular offence of "covering" unqualified assistants, with which we are now concerned. Practically it ignored the offence and connived at the offenders until 1882, and then it was only brought to a sense of its duty by a reminder from the then Home Secretary, Sir WILLIAM HARCOURT, who in June, 1882, in reply to a series of questions by Mr. H. B. SAMUELSON with regard to scandals at Dispensaries in the East-end of London, where the patients were attended chiefly by an unqualified person, and where two deaths happened without intelligent recognition of the nature of the disease, said "*the proper course would be to call the attention of the Medical Council to these cases. The Council had power to deal with them under the 21st and 22nd Victoria.*" Such an expression of opinion from the Home Secretary amounted almost to a rebuke of the Council for its past inaction. At any rate, no time was lost in acting on the Home Secretary's view of the Council's duties. A committee was appointed in 1882 "to consider the abuses which arise from the employment of unqualified practitioners, and to report to the Council whether any means can be adopted for checking these abuses." We give elsewhere a Memorandum setting forth the final Resolutions of the Council in the year following on this subject, based on the report and recommendations of its committee. Our readers will read these carefully for themselves. Briefly, they asked for legislation to make a qualified practitioner "covering" an unqualified one liable to the same legal liabilities as a person falsely representing himself to be a legally qualified medical practitioner; they recommended communications with the Registrar-General to secure amendments of the Registration Acts to prevent evasions of the Act in the certification of causes of death; and finally they recorded, for the information of all whom it might concern, *that charges of gross misconduct in the employment of unqualified assistants, and charges of dishonest collusion with unqualified practitioners in respect of the signing of medical certificates required by law or lawful contract, are, if brought before the Council, regarded by the Council as charges of infamous conduct under the Medical Act.* Nobody can accuse the Council of any hasty judgment on this matter. It passed these resolutions five years ago. Almost every year since it has caused them to be published extensively and prominently in THE LANCET and other medical journals. Until this year it has contented itself with admonishing offenders seriously, but it has not failed to indicate that if the evil continued it would proceed to exercise its only penal power—that of removal from the Register. It had so long delayed this measure that offenders probably came to doubt whether it ever intended to do more. The consequence is that two gentlemen, who probably expected at the most to receive a severe admonition from the President, find themselves removed from the Register. Nobody will be too severe on the Council for having been slow to use its one severe punishment. Nor is it our intention to add to this punishment by any remarks calculated to add to its severity. The Council has clearly intimated through its President that it will be ready after a reasonable time to consider the restoration of these names to the Register. But it has been made abundantly clear that short of taking such a decisive step as the removal of these names from the Register the Council would only have made itself appear ridiculous. Ours is a grave profession. The issues we have to deal with are those of life and death. We have no right to carry on joint practices with unqualified practitioners. In the profession of the law an attorney so offending is struck off the Rolls for ever, and the unqualified person so acting or practising is committed to prison for any term not exceeding one year. In our profession the offence is altogether graver, and the Medical Council would have laid itself open to a yet sterner rebuke from the executive Government if it showed lenience and indecision in the use of its judicial powers. We confidently hope that its recent action will have such a salutary effect that it will not need to be often repeated. This is essentially a poor man's question. The rich can pick and

choose their advisers, and ascertain their credentials. But in populous districts there is not time or opportunity for this, and the unqualified assistant, acting under the cover of his registered principal in the gravest emergencies, is apt to be regarded as a licensed and qualified practitioner.

MEDICINE, like all other sciences, is intimately associated with and dependent upon theory. It is ever advancing as fresh facts are recognised, but its advances are indicated mostly by a shifting vanguard of theories. Fresh discoveries point to fresh fields of investigation, and the appropriate lines of investigation are generally mapped out broadly by theories founded upon past work. Theories are like faith, incapable of demonstration, while they conveniently group together the grounds of that which we would fain believe. Until displaced in favour of some new thought, they stand like the stick round which we hope to train the twining plant of knowledge. They indicate the general direction along which it is assumed that growth will take place, but they are liable to removal if found to be false guides. A theory which appears fairly satisfactory is believed in and acted upon as long as possible. Facts and explanations are unconsciously made to harmonise with it. For the time being it forms the ideal standard or order into which everything of the past and present is made to fit—if possible. Some tight wedging of squares into circles may be necessary, but, provided that a general appearance of order results, the effort needed will probably soon be lost sight of. If they can be rammed together without too much obvious damage to the fact or the theory, they will be likely to hold their place with greater tenacity from being misfits. An old theory which has been generally accepted is more difficult to dislodge than one which has not rusted in its place. In every science the frame of mind in which theories are approached tinges the whole work of the individual. Theories are intended to be helps and guides; they cease to be of service when they are blindly followed as truths. They leave room for speculation and observation, and from their first enunciation they should be continually subject to assaults, until they finally die out or become transformed into laws of nature. Meanwhile some observers are so constituted that they can recognise only deviations, and are prone to general scepticism of everything which is not demonstrable; while others, as the result of mood, temperament, or education, are always in search of resemblances. General experience indicates that that which is most ardently sought can always be found, whether the quest be for resemblances or differences. The world of fact is wide enough to embrace both. Every theory of necessity can be supported by resemblances or combated by differences; hence, if the natural individual bent is too closely followed, there is danger lest, while seeking one fact too assiduously, others which come across the field of mental vision should be overlooked or disregarded. History is full of examples of the strange postponement of discoveries after they had been, according to subsequent knowledge, upon the very verge of completion. Whether this has resulted from some curious obstructive association of ideas, or from an unreasoning pursuit of some fallacious theory, matters little; the fact remains that observations have been misunderstood, and progress delayed. Unless the step in advance has been duly recognised, it may have been recorded in terms which subsequently leave room for dispute about priority. Did SHAKSPEARE really know anything about the circulation of the blood, or did he only express current ideas in poetic language? Did CESALPINO forestall HARVEY'S demonstration of the circulation, or does he not owe an ephemeral fame to a certain ambiguity of expression which has been eagerly seized by commentators of his own nationality? And yet, in our present light, it seems almost inconceivable that darkness should have shrouded this subject so long.

Every diagnosis is based upon theory; hence the frame of mind which deals with it becomes of immense importance. The patient has his list of symptoms ready, and usually has his own theory of explanation. Treatment can only follow the conclusions arrived at from consideration of resemblances or differences from the imagined complaint. Even in consultations there may be a habitual readiness to accept a diagnosis, a habitual tendency to differ. The frame of mind which is prone to recognise solely differences or resemblances may work incalculable mischief. In any given case absolute proof is frequently impossible, although reasonable ground for belief can be attained from a number of stray indications which present numerous points of resemblance and difference from the typical course of disease. Where the former largely predominate, the question of diagnosis is removed almost entirely from the realm of hypothesis, and rendered nearly as certain as if the whole of the pathological processes were immediately visible. When the resemblances and differences are more evenly balanced, the ingenuity and skill of the physician are severely taxed, and the mental attitude becomes still more important. He who naturally looks for variations—that is, for the unusual—will be more likely to startle with fantastic guesses at truth, in which the minor symptoms are unduly dwelt upon, until possibly an absolutely new disease is described in place of a mere variant of an old theme. For clinical teaching, attention to resemblances is more useful than recognition of differences. Students require broad, bold sketching in which the main characters are preserved and readily recognisable, rather than the highly finished picture in which the total effect is sacrificed to trivial detail. Students learn by studying resemblances; science advances by the careful consideration of differences; diagnosis and theory walk hand in hand.

THE yellow fever epidemic of 1888 in Florida has called forth a number of comments which deal with the prevention of that disease, and which are well worthy of consideration. One of these is contained in a report to the Illinois State Board of Health by their secretary, Dr. J. H. RAUCH. In this report it is shown that, notwithstanding an attempt to conceal the several circumstances, yellow fever, which was modified by reason of temperature, had existed during the past winter in the territory between Tampa and Jacksonville; and that cases of "fever" were heard of in March this year which were held by some physicians not to be typhoid, as alleged, but to be part of a "yellow-fever wave" which was passing over Jacksonville. By April 20th the prevalence of the disease was admitted, and it was stated that several of the southern and western portions of the State were to be

looked upon as suspicious. A belief is also current that the introduction of the disease took place through the port of Tampa in May, 1887, and that the gap in its history between that period and its recrudescence in the spring of 1888 was due to the policy of concealment and suppression of information by local health and quarantine authorities in Florida.

In the State of Illinois only one city was, according to Dr. RAUCH'S views, liable to danger; that was the city of Cairo, and a systematic observation of its meteorological and other conditions was at once instituted, and, on the basis of the results ascertained, Dr. RAUCH undertook the responsibility for the action which in his official character he subsequently carried out. We do not know what is the particulate cause of this disease, but there are certain points about its natural history which we do know, and one is that a continuous temperature of not less than 70° F. is necessary to its maintenance and diffusion, and this even in the Gulf region of the United States. There is also, according to the evidence obtained by Dr. RAUCH, no instance of its epidemic spread in places north of 35° north latitude, unless indeed, to quote from HIRSCH, "when the heat has equalled the mean annual temperature of the tropics; and it has on no occasion become diffused in a temperature below 68°F., the winter temperature of the tropics."

Later on in the year the disease became much more prevalent; panic ensued, and with panic came its old associate quarantine, the restrictions of which spread far and near. Illinois had to be protected, and by September the quarantine craze had spread even to Cairo, which city had not only quarantined Jacksonville, but appealed to the State Board for financial and other help to maintain it. But Dr. RAUCH was convinced that the premisses on which he intended to base his action were correct, and that he was not justified in giving the authority of his Board in any shape or form to a quarantine which was unnecessary, and therefore without justification. Hence he immediately declined to authorise the enforcement of the system; and later on, when he brought the matter under the notice of his Board, they passed a resolution endorsing his attitude and approving his action in "exerting the authority of the Board for the abandonment of all quarantine restrictions in the State."

Quarantine, in nearly all its applications, is the result either of ignorance or of neglect. It is resorted to by panic-stricken people, and it is distinctly injurious to the communities affected by it. In the case of this localised epidemic of yellow fever, restricted as it has been to the boundaries of one sparsely settled State, it is declared by Dr. RAUCH to have brought about the loss of millions upon millions of dollars by paralysing industries and embarrassing commerce, and to have led to cruel and vexatious interruption or suspension of travel by means of "shot-gun" restrictions, with all their attendant "barbarities and high-handed outrages," and this at times a thousand miles away from any infected locality. The proceedings are, indeed, stated to have involved "the cold-blooded murder of travellers seeking to return to their homes." With such a sequence of events in prospect, it is not to be wondered at that every effort was made in the early stages of the disease to keep all information away from those who had the power of imposing such restrictions; indeed, this secrecy, which is fatal to any proper attempt at prevention, characterises nearly every quarantine system adopted, and very generally alone suffices to frustrate the purpose which it is intended to effect. In the case of yellow fever outside the tropics quarantine is especially useless; and yet in our own country, which professes to have abandoned such restrictions even in the case of a disease such as cholera (which occasionally assumes an epidemic form in the northern latitudes), we maintain an old and effete quarantine law, which professes to be administered by a department of State for preventing the importation of yellow fever. Dr. RAUCH'S report may usefully be taken to heart by that department; for it is a story showing the utter uselessness of a system which, if carried out stringently, is properly referred to as "useless" and "inhuman," and the value of an official who, whilst he has the courage and honesty to forbid resort to quarantine, has also the knowledge necessary to give force to his recommendation that the prevention of yellow fever must essentially be sought in dealing with the presence of filth in the widest sanitary sense of the word.

ON Monday last, at the instance of the vaccination officer for Bethnal-green, the father of a child was summoned for neglecting to have this child vaccinated. The summons was heard by Mr. BUSHBY, and the defence was the defendant's conscientious objection to vaccination on the ground that other of his children had after vaccination sickened and died. The 29th section of the Vaccination Act, 1867, renders a parent liable to penalty unless he can show "a reasonable excuse for his neglect." The difficulty of the magistrate appears to be that he had to decide a medical question—viz., the fitness of the child for vaccination; he said that he had read a volume of reports and statements against vaccination put before him on the last occasion, and found the same full of points of the greatest importance, which might well be pressed on those who had the making or repeal of the law. The evidence before him was that given by a sister of the defendant, who stated that she knew her brother's children, of whom there had been four; all were born healthy; all had been vaccinated on reaching three months old, and thereafter had fallen into very bad health; the first one died when two years and four months old, and the second when sixteen months old; the third, now aged three years and a half, still lived, but was ailing and weak. The children died of broncho-pneumonia. Mr. BUSHBY said he had no doubt much was to be said on the two sides, but that he considered he had before him evidence which might be admitted to prove the effect of vaccination on a particular family. He therefore accepted this as a reasonable excuse, and dismissed the summons. The magistrate in this case appears not to have distinguished between *post hoc* and *propter hoc*. He probably would not have accepted the opinion of an unskilled woman on this point, and, so far as the published reports of the proceedings are available, the evidence of this witness related only to statement of fact; the conclusion, therefore, was his own. Not long ago a woman asserted that her child, who had been vaccinated with calf lymph, must have been strengthened by the operation, as he had grown so much more sturdy since that; "he had evidently got something of the bull in

him." Mr. BUSHBY would doubtless have laughed at the last observation, but he seriously accepted the other as sufficient for his decision. In the absence of any medical evidence, we hold that the proper course would have been to have adjourned the hearing of the case in order that some trustworthy opinion might have been given as to the fitness of the child for vaccination. This would have been but right in the interest of a helpless child, who is now permitted to remain susceptible to a loathsome and fatal disease. It may, however, be open to doubt whether the Act contemplated an excuse of this sort as being within the discretion of a magistrate. The Act fully provides for the postponement of vaccination on medical certificate, when the state of health of a child is such as to require this postponement, and we should have assumed the absence of such certificate would have had due weight with the magistrate. We trust there will be an appeal against the magistrate's decision; we gather, indeed, that notice of an appeal was given. It is certainly very desirable that children should not be vaccinated unless they are in proper condition, but it is equally undesirable that the lives of children should be imperilled by leaving them susceptible to small-pox.

Annotations.

"Ne quid nimis."

ROYAL COLLEGE OF SURGEONS MUSEUM OF ILLUSTRATIONS.

WE have been asked to make known that the Royal College of Surgeons, in pursuance of their intention to form a collection of pictorial illustrations of disease, will be glad to receive donations under the following heads. (*a*) Monographs or reprints of papers containing illustrations. If authors can spare two copies, so much the better. (*b*) Atlases of illustrations, whether of pathology or external appearances, and whether old or recent. (*c*) The Transactions of Societies—i.e., the Pathological, Medico-Chirurgical, and Clinical; of these any odd volumes will be useful. (*d*) Original drawings or proofs of engravings, woodcuts, &c.; and these should be accompanied by references, and, if practicable, by descriptions. All gifts should be addressed to the Conservator, Royal College of Surgeons, Lincoln's-inn-fields.

THE SUPERVISION OF POOR-LAW INSTITUTIONS.

AN evening contemporary states that 90 of the children in the school of the Strand guardians have serious ophthalmia and 102 slight ophthalmia, making a total of 192 children suffering from this form of disease. The facts came before the Strand guardians on a report of the medical officer, who stated that a large proportion of the eyelids of the children were permanently congested and ripe for disease; he attributed the cause to overcrowding, and recommended that the number of children sleeping in each room should be reduced by one-half. A member of the Board of Guardians added that there were already thirty children below the number for which the school was certified by the Local Government Board. Further, we hear of enteric fever spreading in a Northamptonshire workhouse, indicating very strongly the need for medical inspection of these institutions. Formerly the Local Government Board had a medical inspector who devoted his time to such points as affected the workhouses of the country generally, but at present lay officials seem to be regarded as sufficient for all such purposes. These occurrences of preventable disease reflect upon the supervision which is exercised; for the means by which they can be avoided are enough understood to enable them to be guarded against. It is now some years since THE LANCET undertook an investigation into the circumstances of Poor-law institutions, and the facts which then came to light led to large measures of reform; there is still, however, room for considerable improvement, and nothing short of the systematic medical inspection of all workhouses would provide against the prevalence of preventable disease.

DIPHTHERIA IN THE METROPOLITAN ASYLUM HOSPITALS.

RECENT returns issued by the Metropolitan Asylums Board show that there has been a considerable increase in the number of cases of diphtheria admitted to the hospitals maintained by that Board since such a course received the sanction of the Local Government Board. At the beginning of the week ending Nov. 3rd last these hospitals contained only 6 cases of this disease, all under treatment in the Eastern Hospital, and at the end of the week the number had increased to 9. At the end of each of the following four weeks the number was successively 17, 14, 19, and 30; and on Saturday last the number had further risen to 34, located in four hospitals. The number of cases admitted during the above-mentioned six weeks was 60, which, added to the 6 cases under treatment at the beginning of the period, raises the number to 66; of these, 29 have terminated fatally, 3 have been discharged recovered, and 34 remained under treatment on Saturday last. The numbers are at present too small for the calculation of a trustworthy rate of mortality; but the case-mortality of diphtheria is invariably high, and the advantage to be expected from hospital treatment of the disease is rather from reduction of cases through isolation than from a reduction of the proportion of deaths to cases.

THROMBOSIS OF THE CEREBRAL SINUSES.

WE are indebted to Dr. Douglas Powell for additional references to cases of this disease, by Drs. Wilks, Tuckwell, and Andrew. We add some others, which, with those in our editorial remarks on Dr. Powell's case of "idiopathic thrombosis of cerebral sinuses in a young woman," which we published in the "Mirror of Hospital Practice" for last week, give our readers a full index to the subject. Dr. Tuckwell, in St. Bartholomew's Hospital Reports, vol. x., records the case of a chlorotic girl aged sixteen, who died with thrombosis of the cerebral sinuses and veins; and œdematous softening of the brain with bloody extravasation. Her symptoms were those of extreme anæmia, with severe frontal headache, listlessness, paralysis of the right arm, sudden onset of coma, and rapid death. Dr. Andrew brought before the Pathological Society in 1865 (see Trans., vol. xvi., p. 27) a case somewhat similar in character—thrombosis of the cerebral sinuses, with apoplexy of the optic thalami, consequent on anæmia, in a girl aged twenty. The symptoms during life were slight headache, at first frontal, becoming very severe, vomiting, delirium, and insensibility passing into coma, the pulse being rapid and slightly irregular. Dr. Wilks refers in his lectures on Diseases of the Nervous System to the case of a lady below middle age, the subject of anæmia, who suffered from severe headache, vomiting, transient hemiplegia, became unconscious, had rigidity of limbs, followed by convulsive twitchings, and in whom, at the necropsy, thrombosis of the lateral sinuses was found. He had seen

another somewhat similar case, and says, "I have met with it two or three times in children as the main disease." Dr. Church, in the Reports of St. Bartholomew's Hospital for 1869 (p. 178), refers to a case which he had seen. This was in an anæmic girl, aged twenty; the symptoms were similar to those mentioned by Dr. Tuckwell. Dr. Crisp (vol. x., Path. Soc. Trans.) published the case of a girl, aged sixteen, who was not anæmic. She died with thrombosis of the superior longitudinal sinus and cerebral veins, and refers to Cruveilhier (livr. xxxv., pl. 1). There is also a somewhat exhaustive treatise on the subject of thrombosis of the cerebral sinuses by Dusch, published amongst selected monographs by the Sydenham Society in 1861. The majority of the patients whose histories are on record were young anæmic girls.

THE HEALTH OFFICERSHIP OF RUTHIN.

THE Town Council of Ruthin are somewhat chagrined at the remarks of a contemporary concerning their recent treatment of their late medical officer of health, Dr. Lloyd Roberts. The Mayor, at a public meeting held for the election of a medical officer of health, made certain statements which it is now said were inaccurate, and which have led to the action of Mr. Jones, the successful candidate, being criticised for having applied for a post which it was alleged was only technically vacant. The correct circumstances of the case appear to be that the Town Council of Ruthin were desirous that the medical officer of health and the inspector of nuisances should be placed under the control of the Local Goverment Board, and the town clerk therefore asked Dr. Roberts whether, to comply with the necessary formalities, he would resign, or the Council should serve him with six months' notice to terminate his engagement. Dr. Roberts elected to receive notice, and the Town Council therefore adopted this course and determined to advertise the vacancy. Dr. Jones, observing the advertisement, spoke to Dr. Roberts on the subject, saying he would not apply for the office if there was any understanding between him and the Council that he should be re-elected. Dr. Roberts said that he thought the Council were really almost obliged to re-elect him. Dr. Jones then discussed the matter with the Mayor, and was informed by him that there was no reason why he should not apply. It is due to Dr. Jones to state that he took these steps before making application for the office, but, so far as the resolutions of the Town Council are concerned, we should have anticipated that the Mayor would have pointed out that the vacancy was only created with a view to giving the Town Council an opportunity of placing the medical officer of health under the control of the Local Government Board. The second point upon which we desire to comment is the action of the Town Council in not re-electing Dr. Lloyd Roberts. A member of the Council has been good enough to state that "the Council were not satisfied with Dr. Lloyd Roberts, and were glad to avail themselves of the opportunity of giving him this six months' notice. He instanced the disagreement he had had as to the nuisance at the tan-pit, which, he said, Dr. Lloyd Roberts declared was no nuisance, whilst he (the town councillor) asserted that it was, for there were fifty tan-pits full of stagnant water, and it did not require a medical man to say whether it was a nuisance or not; a child could tell it was." We quote from a local journal. We have before us the statement of the Mayor that Dr. Roberts had faithfully served the authority for twelve years, and now we learn from a statement of a member of the Council that this device was resorted to in order to dispossess him of his office. We have quoted at some length the objection to Dr. Roberts, which is given because it will enable the public to understand the sort of reasons which are held to be sufficient by some local authorities for terminating the appointment of their officers. In regard to the particular matter referred to, we have not the least reason to doubt that Dr. Roberts advised his authority properly, but the advice was not palatable to a member of the Council, and he has thought it well to use this in justification of the Town Council's proceedings. It is lamentable evidence of the circumstances under which medical officers of health have now to perform public duties.

THE PSYCHOLOGY OF DECEPTION.

AN extremely entertaining and suggestive paper by Professor J. Jastrow, dealing with the psychology of deception appears in the December number of the *Popular Science Monthly*. The simplest type of a deception occurs when, owing to an unusual disposition of external circumstances, the inference necessarily drawn leads to an incorrect conclusion. The human race labours under an inherent logical necessity to interpret a new experience by the old, the unfamiliar by the familiar. This notion affords an explanation of the types of deception experienced in conjuring tricks, where the whole psychology of the process consists in inducing the spectator to draw the natural logical inference, which will be a wrong one. The delusions of the insane, according to the author, are often misinterpretations of abnormal sensations under the guidance of a dominant idea. Of the physical phenomena of spiritualism, and of the sincerity of those who affirm the impossibility of fraud, the author writes convincingly and temperately. While admitting that these witnesses are honest, he considers their mistakes arise from the non-recognition of their liability to error, and their predisposition to see in everything the evidence of the supernatural. The concluding pages are devoted to careful analysis of the phenomena of spiritualism, in which self-deception plays the leading *rôle*. Professor Jastrow speaks hopefully of the future, when "with the spread of education, with the growth of the capacity to profit by the experience of others, with the recognition of the technical requisites that alone qualify one for a judgment in such matters, with a knowledge of the possibilities of deception and of the psychological processes by which error is propagated, the soil upon which spiritualism and kindred delusions can flourish will be rendered unfit." The growth of the capacity to profit by the experiences of others largely coincides with increasing age and increasing personal experience. No amount of education short of experience is, in our opinion, likely to check the propagation of error and the misrule of deception. The marvellous is always attractive, and will always be supported by a crowd of duped votaries.

A SICK AND IMPRISONED LIGHTHOUSE-KEEPER.

THE perils of the lighthouse service have been recently illustrated by an occurrence at the Chickens Lighthouse, situated on a reef of rocks near the extreme south of the Calf islet, which is separated by a sound from the southern coast of the Isle of Man. The keepers are each in turn six weeks at the lighthouse and a fortnight on shore, three men being always in the building and a fourth ashore. Besides these, there is a fifth ready to act as occasional keeper should any of the regular keepers be taken ill while on duty. This occurred to one of the keepers named Beggs. He returned to the lighthouse during an interval of calm weather on the 1st ult., six days past his time, and was soon after taken ill with what appears to have been peritonitis, for which the principal keeper (Black) treated him with hot-water flannels and turpentine, which gave temporary relief. He subsequently became so much worse that Black hoisted the signal for relief, and repeated it more urgently, though he had only too much reason to fear that it could not be sent. This proved to be the case. On

four different days the relief boat set off, but only to be driven back without being able to approach the rocks; and on the night of the 22nd Black and his other assistant (Fraser) feared that Beggs was dying. Fortunately a landing was effected on the 27th, and with great difficulty Beggs was brought by his comrades down the building and the long iron ladder to the landing place and into the boat, which landed him and Black, who had been kept three weeks beyond his usual time, at Port Erin. Beggs was conveyed in a carriage to Port St. Mary, where the keepers live, and attended to by Dr. Rowley Jones, the medical officer to the lighthouse. On the 30th Beggs was reported to be much easier, and making satisfactory progress towards recovery.

PROGRESS IN PUBLIC HEALTH.

IN a thoughtful address on Recent Advances in State Medicine, delivered by Dr. Henry B. Baker at the last annual meeting of the American Medical Association, prominence is given to the need for legislation in three essential directions for the prevention of infectious diseases. The first need is held to be notification, the second isolation, and the third disinfection. This plan follows very closely on the lines of our own progress in this direction. We wish that we could in the same way claim that our own advance corresponded in another respect with that which has characterised the State of Michigan, where the Legislature has appropriated a large sum for the building and equipment of two laboratories, one of which is to be for the purposes of hygiene. The director of this laboratory is Dr. V. C. Vaughan, whose chemical and bacteriological researches are well known. In connexion with the subject of cholera and its prevention, reference is made to an experiment in which the salt water in New York Bay had been sterilised and inoculated with "pure cultivation of the spirilla of Asiatic cholera," whatever these may be, and also with the spirilla of Finkler and Prior, and that they had not only been kept alive, but had also greatly increased in numbers. The inference is drawn by the experimenters that if dejecta from cholera patients should be thrown in the lower bay cholera might thus gain a foothold on the contiguous shores. No information was, according to Dr. Baker, forthcoming as to the temperature at which the cultivation was maintained, nor on other matters of importance in relation to the experiments.

NEW OPERATION IN EMPYEMA.

PROFESSOR M. S. SUBBOTIN of Kharkoff describes in the *Vrach* (No. 45) a new operation he has devised for opening the thoracic cavity in empyema, with the view of obviating the danger arising in Estlander's operation and in the modifications of it practised by Schede and Sprengel from the extensive raw surface which is necessarily allowed to remain in contact with the purulent discharge. Professor Subbotin suggests that in cases where the lung itself is free from disease, the unyielding nature of the thoracic wall may be overcome without the removal of ribs by simply cutting them through; also that if a rib is divided in two places and the intermediate portion removed, the chest wall will become flexible and may be pressed inwards so as to lessen the cavity of the empyema, and in this way assist to put an end to the suppuration. After thinking out a plan based on the above considerations, he determined to apply it in operating on a case under his care in the Kharkoff clinical wards last June, The patient having been chloroformed, an incision was made along the seventh rib, which was then stripped of its periosteum and excised to the extent of seven or eight centimetres. An extensive opening was here made into the pleural cavity. After the pus had been evacuated the cavity was carefully cleansed and the opening well covered with gauze, and a gauze compress applied. An incision was then made along the border of the pectoralis major about five centimetres in length, exposing the sixth, fifth, and fourth ribs, and these were cut away (the periosteum not being left) with forceps until the rib became movable. Another incision was then made in the line of the posterior fold of the axilla, exposing the same ribs, which were again divided as before; the wounds were then sutured and dressed with gauze, a large thick pad of the same substance being applied outside, with a good compress bandage round the thorax. The upper wounds were kept from communication with the empyema. When after a few days the intra-thoracic wound was dressed, a drainage tube was put in. The case recovered, but three months after the operation there was still a small sinus which continued to discharge. The advantages claimed by Professor Subbotin for his operation are the small raw surface which is left in contact with the purulent matter, and the firm but movable portion of thoracic wall which can be pressed inwards by bandaging, so as to diminish to a considerable extent the size of the cavity.

ST. MARY'S HOSPITAL.

AT a recent meeting of the St. Mary's Hospital Medical School Committee, Mr. Field's resignation of the post of Dean was accepted with universal regret. Mr. Field has held the office for upwards of six years, during which time the school has more than doubled in size. The following resolution was unanimously adopted: "That a testimonial be presented to Mr. Field in recognition of his great services to the Hospital School, and that subscriptions be invited for this object from members of the staff, former and present students, and other friends." Gentlemen wishing to subscribe are requested to send their names as soon as possible to Mr. Malcolm Morris, 8, Harley-street, W. Mr. Field has been succeeded in the office of Dean by Mr. Herbert W. Page, one of the surgeons to the hospital. For the future the Dean's work will be divided, and the financial part of the duties will be managed by a treasurer, and Mr. Malcolm Morris has been selected for the post. Dr. Sidney Phillips has been reappointed Sub-Dean.

CARRYING REVOLVERS.

AMERICAN customs and methods are often highly respectable and deserving of imitation. One particular habit which has come to us with a Transatlantic introduction is, we venture to say, both useless and objectionable. We allude to the practice of carrying about a loaded revolver. This may be justifiable and even advisable in some parts of the western continent, but it is not usually a requisite in European life. We live, thanks to our paternal standing as a nation, in a land where cities and their slums do not rise and grow with magical rapidity, where our principal thoroughfares are for the most part well travelled and well lighted, and officers of order are distributed for the protection of life and property. We have still, it is true, a wide and thinly peopled rural area and lonely roads in abundance, but our country population, as a rule, is peaceable and contented, and our roads are no longer the chosen haunt of armed footpads. The modern traveller chooses the railway route, and the highwayman has lost his occupation. It is as yet exceptional, moreover, to find even his modern representatives, the burglar and the garotter, furnished with firearms. The risk of detection should they misapply these weapons is probably too great to commend itself to the majority of prudent law breakers. We fail to see, therefore, why revolvers should be thought by many in this country

to be an almost necessary article of property. The ever possible temptation to use it at a wrong time should not be disregarded. With such a weapon in unwary hands, the consequences of an angry moment, as experience has proved too often, may be most disastrous. In view of this fact, and the absence of any ordinary need for its use, we can fully concur in Mr. Justice Mathew's opinion that it may yet be advisable to make the custom of wearing a revolver, without due reason shown, an indictable offence. As a check upon this too prevalent practice, we would again suggest that, like other firearms, like crests, and a variety of personal possessions, it should be subject to a tax, and that such tax should be of substantial amount.

THE ALLEGED INCREASE OF CANCER.

APART from the purely surgical interest attaching to the Morton Lecture on Cancer and Cancerous Diseases, delivered on the 26th ult. by Sir Spencer Wells before the Royal College of Surgeons, the lecture contained in its opening remarks some important statistical information tending to prove that such diseases are on the increase in this country. Thus in England, during the twenty-six years 1861–87, the mortality of cancer has risen from 360 per million of the population to 606—an increase which, Sir Spencer Wells truly remarked, is far more than can be attributed to improved registration. In Ireland, although the total mortality does not show so striking an increase, yet when this is corrected by reference to the diminishing population of that country, the proportional increase per million is almost as striking as that for England—viz., from 1864 to 1880 an average annual rate of 676, and from 1881 to 1887 a rate of 873. In Scotland the proportion of deaths from cancer is larger than in Ireland. A like increase in mortality from cancer during the last decade is noted in the United States. It is obvious that improved diagnosis of malignant disease and greater accuracy in making returns do not suffice to explain the rise in these figures; and Sir Spencer Wells deserves thanks for strenuously urging the importance of more detailed statistical returns, especially as to the organs primarily affected, the ages and sexes of the subjects, and the districts in which the various forms of cancer most prevail. It will be seen that a question on this subject was put in the House of Commons on Tuesday last. Mr. Ritchie's reply, that the medical officers of the Local Government Board were too much occupied to undertake the inquiry, implies the necessity for an improved system of returns made to the Registrar-General.

PHYSICAL PUNISHMENT IN SCHOOLS.

THE position of Board School teachers with regard to the corporal punishment of refractory pupils is not an easy one. School children are often very provoking, not only from childish idleness and inattention, but from deliberate wilfulness. One can hardly wonder, therefore, that a teacher, though perhaps ordinarily collected enough, is occasionally surprised into something like a show of temper, which vents itself in muscular treatment of the offender. In judging of such a case, there are to be considered the pupil's fault and its provoking accompaniments, the need of decisive, perhaps rapid, action, and the teacher's natural feeling of indignation. The resulting chastisement, whether just or excessive, will depend on his self-control, and this, after all, is only a human and imperfect quality. We can well understand how it is that a merited stroke now and then comes down more heavily than it should. The use of needless roughness is, of course, inexcusable; but the fact that bodily punishment is required and is allowable ought to temper the vehemence of complaint with which teachers are sometimes assailed. They too, like our professional medical brethren in lunacy cases, are apt to be annoyed and injured by unnecessary legal proceedings, even where they have simply done their duty. Their difficulties in this respect, indeed, are sufficient to have attracted the notice both of the London School Board and the Home Secretary. The suggestion of the latter that a regular time and method should be observed in inflicting punishment is worthy of notice. As regards regularity of method it might certainly be adopted. Nothing is more objectionable than a habit of striking and cuffing at random. If, however, it is true of school punishments as of many other matters, that no time is like the present, the rest of the proposal has not the same practical value. A member of the Board advises that, in case of legal action against a teacher who had not exceeded his duty, the solicitors of the Board should act for the defendant. This arrangement might prove too costly to the ratepayer. Probably a better plan, if it could be acted on, would be to require for each case a short preliminary inquiry before a magistrate, who could summarily quash the proceedings where no real injury had been inflicted. The sifted residue of more serious cases would then alone come up for decision, and a considerable saving of time and expense would be effected.

CHRISTMAS TREES FOR HOSPITALS AND INFIRMARIES.

WITH the near approach of Christmas one already begins to feel something of that glow of holiday satisfaction and of happiness which it ushers in. At such a time the requests of charity should not be made in vain, and among these is one to which we would specially direct attention on behalf of our hospitals and workhouse infirmaries. The claims of the poor upon the rich are never more freely recognised than at this season, and those of the poor who are also sick have obviously a double hold upon our sympathy. The great majority of patients in hospital can enjoy in a very fair degree the annual novelty and the substantial benefits of the Christmas tree. It comes as a timely diversion to brighten the frequent dulness of their lot, and its kind favours cannot fail to win their appreciation. A fortnight still remains in which any who will may offer something out of their means by way of Christmas present to cheer their suffering fellows. We would therefore take occasion to remind our readers that their gifts will be welcomed at the nearest hospital or infirmary, and that in giving quickly they will give double.

WOUNDS OF THE HEART.

DR. SIMON THOMAS of Rotterdam relates two cases of wounds of the heart which are of some interest. The first is that of a girl who was stabbed by her lover in a fit of jealousy with an ordinary household knife. After receiving the wound she got up from her seat, and ran into another room, where she dropped and died in five minutes, having gone a distance of about eight yards from the spot where she was stabbed. The necropsy showed that the knife had passed in a slanting direction from the upper border of the second right costal cartilage, through the sternum at the junction of the manubrium with the corpus sterni, through the right auricle, behind the pulmonary artery, and finally through the aorta. The pericardium was full of blood, the heart firmly contracted and empty; and it was the pressure of this effused blood, unable to escape, that caused the heart to stop beating. Very little hæmorrhage had taken place externally, but the right pleural cavity was filled with blood. The main points of interest in this case, Dr. Thomas thinks, are the ease with which the knife penetrated the sternum, "like going through

butter," and the distance the girl ran after the injury. The other case was that of a labourer, who was stabbed with a sheath-knife by one of his fellow workmen, whom he was annoying. The knife entered at a spot seven centimetres to the left of the sternum, between the third and fourth ribs. It pierced the anterior edge of the lung and the pericardium, and made a great gaping wound in the left ventricle. The pericardium was full of blood, the heart not contracted, and the left pleural cavity so full of blood that the lung was collapsed. In this case death followed almost immediately after the injury. Dr. Thomas ascribes this suddenness to the fact "that so much blood emptied itself in so short a time through the great gaping ventricular wound that the further duration of life was impossible."

CHILDREN'S DISEASES IN RUSSIA.

THE report of the work done in the St. Olga Children's Hospital in Moscow in 1887 has recently been published, and shows what a large amount of good that institution is doing. The number of in-patients at a time appears to be only about 33, but the total number, including out-patients, treated during the year was more than 8000. Of these, 1113 suffered from intestinal catarrh and 805 from bronchitis. Rickets seems to be quite as common as with us, although it is generally referred to abroad as the "English disease," no less than 399 cases being recorded. Regarding this affection, Dr. Schultz, one of the physicians, appends a note giving the results of his treatment of it by phosphorus—a matter concerning which a discussion took place in the last congress of Russian medical practitioners. Dr. Schultz cites several contradictory opinions from Russian and German sources, and gives as the result of his own observation that phosphorus is very valuable in "the English disease." The mixture prescribed by him consisted of 2 parts of ol. phosph. of the strength of 1 per cent., with 40 parts of ol. amygd., 21 of gum arabic, 200 of aq. menth., and 50 of syrup. Of this, which was made up as an emulsion, a teaspoonful was given every night; that is to say, 0·0002 gramme of pure phosphorus was the daily dose. This treatment was carried out in twenty-five cases, all but two of which were decidedly improved. Instructive tables are also presented by Dr. Alexandroff, showing the results of operative and non-operative treatment of different classes of hip disease. In fungoid degeneration operative measures seem to have proved very successful, and in tubercular disease excision of the head of the femur appeared to give much better results than extension and Taylor's splints.

PATENT MEDICINES.

THE Blue Book issued by the Commissioners of Her Majesty's Inland Revenue supplies some curious facts connected with patent medicines. For the year ending March 31st, 1888, the revenue received no less than £191,475 from the issue of stamps for patent medicines, this amount being nearly twelve thousand pounds in excess of that received the previous year, and very nearly sixty thousand pounds in advance of the amount received in 1879. At the lowest computation this indicates that during the past year no less than a million and a half sterling has been expended in the purchase of patent medicines which are liable to stamp duty. Many proprietary medicinal agents are subject to penalties unless they form a component part of a medicine prepared in accordance with the prescription of a qualified medical practitioner. The peculiarities of the Stamp Act seem to be endless. Why the Board of Inland Revenue should forego their claim when a substance is prescribed, and should enforce it when it is simply purchased across the chemist's counter, surpasses comprehension. A prescription is necessarily an indication that responsibility has been assumed by the person prescribing, but the Government stamp affords no guarantee. It merely shows that the Government is ready to profit gratefully by the faith of those who are prepared to treat themselves. An uncomplimentary term is applied to the man who is his own lawyer. We forbear to press the comparison. The increase of the revenue during the last ten years speaks for itself.

OPERATION FOR EXCISION OF EYEBALL.

DR. COPPEZ, of St. John's Hospital, Brussels, publishes in the current number of *La Clinique* the details of a method of enucleation which he considers to be easier and simpler than the methods of Bonnet and of Tillaux now in use. The patient having been anæsthetised and the eyelids separated by a speculum, a thread is passed transversely through the cornea by means of a curved needle; the ends of the thread are knotted and the loop held in the left hand. By traction on this loop the eye is drawn slightly forward, and with a curved scissors the conjunctiva is divided close to the corneal edge. The subconjunctival tissue is then torn through, and the tendons of the recti muscles come into view and are divided, next the tendons of the oblique muscles, and finally the optic nerve. Dr. Coppez claims for his operation that it may be practised with fewer instruments—a curved needle, scissors, and a speculum; that the optic nerve may be divided more directly and at a greater depth in the orbit, which in the case of malignant tumours is of great importance; and that the consequent hæmorrhage is less considerable than in the ordinary operations. The only objection to it, he thinks, is that the globe might be rendered flaccid by the escape of the aqueous humour through the needle-holes; but that is of little importance.

ENTERIC FEVER AT ST. HELENS.

ENTERIC FEVER has appeared in a fatal form in St. Helens. At present the cause does not seem very obvious, but it must be remembered that "fever" has been an excessive cause of death there in former years, the average rate of fatality from that cause in the ten years 1872-81 being not far from double that which prevailed in the twenty large towns of England and Wales. In 1882 the midden system abounded, the sewage was led into a brook, and the inspectors of nuisances were largely engaged in superintending mere scavenging operations, instead of performing their more important public health duties. But Mr. Spear gave some hope that the authority were really desirous of removing from their midst the more obvious causes of preventable disease.

INDECENT "MEDICAL ADVICE."

AMONG the many known forms of indecent publication, not the least injurious or—to persons possessed of any pretensions to moral sense—disgusting are the advertisements of so-called specialists in private diseases. These handbills, which all our readers must have seen, are mere incitements to vice and lust, thinly covered by a veil of quasi-medical advice. In them the "specialist," usually under some showy title, openly thrusts forward what he takes to be an antidote with one hand while he insinuatingly offers the poison with the other. Obviously, no legitimate purpose of trade is served by these bills. On the other hand, it cannot be doubted that they sow the seeds of vicious habits and the diseases to which these give rise. Their repression would injure no one engaged in any honest calling, and it is a needful preliminary to any efforts intended to strengthen the physical and moral health of the people. We would earnestly commend the matter to the attention of the police authorities.

THE BELFAST MEDICAL STUDENTS AND THE ROYAL UNIVERSITY.

AT a very large meeting of the members of the Belfast Medical Students' Association, held in the theatre of the Royal Hospital on Saturday, Dec. 8th, the President of the Association, Dr. O'Neill, in the chair, it was agreed to memorialise the Senate and Standing Committee of the Royal University on the following points:—1. That, while the students have not the slightest complaint to make in regard to the fairness of the examinations, they feel justified in protesting against the striking inadequacy of the representation of the Belfast Medical School on the Examining Board. They base their protest on the following figures, which speak for themselves. Of all the students who have graduated in Medicine in the Royal University during the past five years 51·6 per cent. have gone up from the Belfast School. Notwithstanding this large percentage, among the nine examiners at the degree examinations there is not one Belfast man. 2. That the University would consider favourably the application of the Board of Management and staff of the Belfast Hospital for Sick Children to have this hospital recognised by the Royal University and its certificates accepted. 3. That the Senate would consider favourably some suggested changes in reference to certificates &c. We cannot doubt that the Senate of the Royal University will give a fair and careful consideration to the suggestions contained in this memorial signed by 188 students attending the Belfast Medical School. In reference to the first request, there seems to be, as matters stand at present, some injustice done to Belfast. As to the question of the recognition of the Belfast Hospital for Sick Children, this matter has already come before the Senate, as in March, 1887, the Board of Management and the medical staff sent a petition to the Senate requesting them to recognise this hospital as an institution from which the Royal University will receive certificates for attendance on diseases of children. The third point, as to the certificates, we understand has already been reported upon by the Medical Committee of the University. The Belfast students, we understand, are anxious to ask for no change which would in any way detract from the high standard of education which the Royal University has so rapidly attained, and of which they are justly proud.

FREQUENCY OF DISEASE OF THE MIDDLE EAR.

DR. V. P. ZERENIN, of Moscow, has published an account of an extensive series of examinations he has made on the condition of the middle ear in stillborn children and in children who have died before they were weaned. He finds that it is best to begin the examination from the tympanic membrane, as this is usually sufficiently transparent to permit the nature of the contents of the cavity to be seen before it is destroyed. One result obtained, which is important from a medico-legal point of view, was that a portion of the liquid in which an animal was drowned, or in which the body of a child was immersed, was capable of finding its way to the middle ear. Some 400 bodies of children dying in the Moscow Foundling Hospital were examined, of which details are tabulated in 245 cases. Out of this number, it is somewhat astonishing to learn that the tympanic cavity was found to be normal in 30 only. In 20 the middle ear contained air, and, in addition, a bloody, mucous, or puriform liquid. In 57 cases dark grey mucous or mucopurulent matter was found, with tumefaction of the mucous membrane. No less than 138 cases presented the signs of purulent catarrh. The frequent occurrence of suppuration of the middle ear is accounted for by Dr. Zerenin by the fact that the children had been brought up under bad hygienic conditions, besides being insufficiently nourished, their ears thus forming suitable soil for the development of pyogenic microbes. He suggests that more attention should be paid to ear diseases in infants, and points out that constant restlessness, especially of the legs, is very frequently an indication that disease of the middle ear is commencing.

THE PHYSIOLOGY OF THE BRAIN.

A VALUABLE contribution by Professor Schäfer is contained in the forty-third volume of the Proceedings of the Royal Society: a comparison of the periods of latency of the ocular movements on the excitation of the frontal and occipito-temporal regions of the brain. Conjugate deviation of the eyes to the opposite side is produced by excitation of entirely different regions of the cerebral cortex. Of these parts, the frontal region is distinguished from the rest by the fact that its removal produces paralysis of that movement. This fact has been regarded by Ferrier as indicating an important functional difference, the movement in the one case being probably caused by the direct action of this part of the cortex upon the centre of origin of the nerves to the ocular muscles; but in all other cases by indirect action, the movement—when, e.g., the visual or auditory region is stimulated—being the result of visual or auditory impressions, being provoked in the brain by the excitation, and these impressions producing indirectly the action in question. Professor Schäfer has found that the latent period is longer by some hundredths of a second in the case of stimulation of the occipital lobe or of the superior temporal gyrus than when the frontal area is stimulated; thus indicating that in the former case the nervous impulses must be transmitted through at least one more nerve centre than in the latter. The additional centre may be the frontal centre itself, but this point requires further investigation.

THE PASTEURIAN TREATMENT OF HYDROPHOBIA.

IN a paper read before the Royal Hungarian Academy of Science at Buda-Pesth, Dr. Högyes (*Centralbl. f. Bakter.*, No. 23) gave the results of his prolonged studies upon the Pasteurian treatment of hydrophobia. They were wholly favourable to M. Pasteur's method, which is described as being based upon a well-proved experimental ground. The practical application of the plan, the author stated, has shown good results from the statistical standpoint; whilst the method has introduced a new principle in the employment of protective inoculation, since it permits of the latter being effectually performed after infection has occurred.

TEMPERANCE AND TOTAL ABSTINENCE.

THERE is a great deal of time, and temper, and type wasted over a perfectly useless discussion—the superiority of teetotalism over temperance. Half a loaf is better than no bread, and while our teetotal friends are sighing over the refusal of some of the best men of all creeds and parties to go all lengths with them in their great and noble efforts to abate the national vice, we hail every effort of any man to increase his own sobriety and the nation's. An honest coachman who reduces his beer to proportions which leave his head and his joints clear, and induces others to do so, is to us a valuable soldier in the great army of reformers. A man who abandons "nips" and public-houses, however respectably conducted, and restricts his alcohol to mealtimes, shows a wonderful advance on the man who perseveres in such injurious modes of drinking. We confess to thinking the "well-conducted public-house" somewhat of an ideal conception. There are degrees of respectability in public-houses, and yet, with the growth of temperance there is a keener competition, which sometimes vulgarises seriously even the better class of houses. The great thing

for all to remember is that "nipping" and public-house drinking are mischievous, and contrary to all common sense and physiological teaching.

TYPHOID FEVER IN FRANCE.

A REPORT was lately presented to the Committee of Public Hygiene by Dr. Brouardel on the distribution of typhoid fever in France. From this it appears that enteric fever is endemic in many of the large towns, but that the death-rate amongst civilians is not high. It is amongst the military that this dire disease works havoc. In the twelve years previous to 1884 the total effective of the French army was 5,375,409 men. The number of typhoid fever cases were 151,319, of which 17,642 died. The total death-rate from all causes was 55,189, consequently a third of all deaths was due to typhoid fever. The civil authorities maintain that this high death-rate in the army proves that it is the military authorities who are to blame for spreading the fever amongst civilians, and not the insalubrity of the cities. To this the military authorities reply that typhoid is known to break out sporadically amongst the people of certain towns, but is not epidemic, because the towns-people are, so to speak, acclimatised to the morbid influences. An epidemic is always imminent, the fever only requiring a suitable soil to enable it to spread. This takes place when a number of young soldiers from quite different parts of the country are brought together in one of these insanitary towns. It is pointed out that in the tables of mortality the death-rate from typhoid fever amongst the civil population follows the same curve as the military death-rate, the amplitude of the latter being, however, five or six times greater. The sanitary arrangements of some of the garrison towns appear to be very bad: "They throw their sewage into the streams and rivers, and draw their drinking water from contaminated sources." The committee were so impressed with the report that they resolved:—"1. That the conditions of the propagation of typhoid fever, and the means whereby its progress can be stayed, are now so well known that by proper precautions it could be easily stamped out, and the country saved twenty thousand lives every year. 2. That the clearing of France of typhoid fever is of national interest, and ought to be at once undertaken by the State."

GERMAN MEASLES AND VACCINATION.

GERMAN measles, and possibly some scarlatina, is prevalent in Pontefract, and the guardians have in consequence suspended the work of the public vaccination stations for two months. This is sound policy, for such a lesion as is brought about by the protective operation of vaccination must necessarily run some risk in cases where an eruptive fever is following its course at the same time, and it is always important that every avoidable risk should be met in advance.

THE MEDICINAL VALUE OF COLOUR.

AT a time when fog is prevalent, any mention of the remedial value of colour and brightness appears extremely tantalising, although from personal experiences of the depressing influences of darkness and gloom it is probable that everyone will rate the contrasts more highly than at any other time in the whole year. Colour treatment has been suggested for various forms of mental derangement—bright crimson surroundings for melancholia, soft blue for maniacal excitement, and so on. The report which has reached us leaves much to be desired from a scientific standpoint; meanwhile there is very little room for doubt that a prolonged period of darkness largely influences the mental attitude, and, by hope deferred, favours a general feeling of misanthropy. Pessimism flourishes in the autumnal and winter seasons, optimism in spring and summer, even though the statistics of deaths from suicide show an increase in bright weather. To restate a belief in the remedial value of colour is merely to insist upon the therapeutic effect of change, since, in advising change of scene, brightness and interest are always the objects sought. No one would recommend a course of fogs as an alternative for sunshine. In other words, stimulants, as a rule, are more valuable than depressants.

THE WILSON FOX MEMORIAL.

THE commission to paint the memorial portrait of Dr. Wilson Fox was accepted by the late Mr. Frank Holl. On his death, which occurred before the work was commenced, the committee, after consideration, decided to offer the commission to Mr. Val Prinsep, A.R.A., by whom it was accepted. The first portrait has been completed by him, and is most satisfactory; he is now engaged upon the others. The amount subscribed will enable the original plan to be carried out; a portrait will be presented to Mrs. Wilson Fox, to the College of Physicians, and to University College. In addition, a photogravure of the portrait will be sent to each subscriber.

CALF LYMPH IN SWEDEN.

THE institutes for vaccination from calf lymph largely increased their spheres of action during the year 1886, but the results were not so favourable as in former years. Out of 2261 children vaccinated with calf lymph 5 per cent. were unsuccessful. This contrasted unfavourably with the numbers in 1885, which gave 2 per cent. The cause seemed to be that the lymph was not so good as usual at the beginning of April, owing to the fact that the first vaccinated calves had been inoculated from six months' old lymph. The increased number of vaccinations necessitated the warming of the institutes in order that the vaccinations might be continued during the winter. The leading medical men of Stockholm believe the calf lymph vaccination will prove as efficacious as before, without leaving any ill effects.

PYRODINE, THE NEW ANTIPYRETIC.

NOTWITHSTANDING the strongly worded caution which we published in our last issue against using this new drug, except in the most severe and critical cases, and even then in the smallest doses and at long intervals, we hear that it is being occasionally employed and causing grave and serious symptoms. We would again point out that doses of from eight to twelve grains sometimes gave rise to toxic effects, even when administered with every care, by Dr. Dreschfeld, as mentioned in his article, and we would reiterate our caution with regard to its employment.

DRUNKENNESS IN BELGIUM.

ACCORDING to a recent Parliamentary report drawn up by the Prince Rubempré, drunkenness is seizing with a terrible grip the working population of Belgium. Belgium is only surpassed by Bavaria in the consumption of beer, 240 litres a year being credited to each inhabitant; while Russia and Denmark alone surpass Belgium in the consumption of spirit, the average in Belgium being 13 litres a year per inhabitant, or about 50 litres a year per adult. Dr. Petithan stated at Liège in 1886 that there were 100,000 persons in Belgium who drink half a litre of gin a day, and no less than 50,000 who drink a whole litre. Such infatuation seems scarcely credible in civilised countries; but, alas! civilisation is not at all inconsistent with folly. The number of public-houses is very large. The outlook is bad for Belgium if the State can do nothing to check this degrading vice. But we are not in a position to throw stones.

MEASLES AND SCHOOL CLOSURE.

CARDIFF is suffering from a very extensive epidemic of measles, and it has practically been decided to close the elementary schools in consequence. This step will, it is said, affect no less than some 20,000 children. There is at present extremely little information to show what is the influence of school closure on measles in a large town when the closure is only adopted after the disease has gained some considerable hold upon the population, and it is very desirable that the matter should be carefully studied and reported on, such sources of error as associating the natural decline of the epidemic with the closure being avoided.

FOREIGN UNIVERSITY INTELLIGENCE.

Dorpat.—Professor Unverricht of Dorpat has accepted the chair of Internal Medicine.

Freiburg.—Dr. Ziegler, Professor of Pathology in Tübingen, has been offered the chair of Pathology.

Kieff.—Extraordinary Professors Kuchin and Kuznetsoff have been raised to the rank of Ordinary Professors.

Lausanne.—Dr. de Cérenville is to have charge of the Medical Clinic, and Dr. Rona that of the Surgical Clinic, in the new University.

Munich.—Professor Pfeffer of Leipsig has been offered the chair of Botany.

St. Petersburg (Military Medico-Chirurgical Academy).—Professor Pashutin has been reappointed Scientific Secretary for another period of three years.

Vienna.—The appointment to the vacant chair of Medicine has not yet been made. The names mentioned in connexion with it, in addition to that of Professor Schrötter, are Professor Riegel of Giessen, Dr. Mossler of Greifswald, Dr. Quincke of Kiel, and Professor Rembold of Vienna.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.

THE deaths of the following eminent foreign medical men are announced:—Dr. Josef Lenyossek, Professor of Anatomy in the University of Buda-Pesth, at the age of seventy.—Professor Kierulf, of Christiania.

THE first of the actions—viz. that against the *Standard*, newspaper—which the firm of Sampson Low, Marston, Searle, and Rivington have instituted with reference to the premature publication of portions of Sir Morell Mackenzie's book, entitled "The Fatal Illness of Frederick the Noble," will, we learn, shortly be ripe for trial.

AT Idle, near Bradford, some sixty persons out of a small population are stated to be suffering from enteric fever, and bad water supply with defective means of drainage are alleged to have brought the mischief about. Now that disease has been actually produced the public wells are stated to have been closed.

MR. R. S. GUTTERIDGE, L.F.P.S. Glas., is a candidate for the representation of the Strand division on the County Council, and Mr. M. C. Soutter, M.R.C.S. Eng., A.K.C. Lond., for that of the Brownswood Park District of the Middlesex County Council.

THE movement set on foot a few days ago in Woolwich to erect an ambulance memorial to the late Colonel Duncan, M.P., bids fair to be a great success. The preliminary inquiry has led to some fifty or sixty offers of support.

WE are informed that Mr. W. Scovell Savory, President of the Royal College of Surgeons, resigned his membership of the British Medical Association some weeks since.

DR. JAMES MURPHY of Sunderland has been elected a Corresponding Member of the Société de Médecine Pratique de Paris.

REPORT OF
The Lancet Special Commission
ON THE
BRITISH EMIGRATION SERVICE.

LIVERPOOL.

LIVERPOOL is undoubtedly the most important port in England so far as emigration is concerned. Yet here, as at Glasgow, we found the same conflict of authorities and the same want of unity in the sanitary services. It is true that, under the 287th section of the Public Health Act of 1875, the Corporation of Liverpool are appointed the sanitary authority for the port of Liverpool; and this implies control over all ships entering the Mersey to reach the Liverpool, Birkenhead, and Garston docks. Thus, if there should be any case of infectious disease on board a ship, the medical officer could be warned in good time. On the other hand, according to the old Quarantine Act of George III., which was re-enacted by the Public Health Act of 1875, a medical officer is appointed by the Customs. The Act states that "every vessel having on board any person affected with a dangerous or infectious disorder shall be deemed to be within the provisions of the Act of the sixth year of King Geo. IV., chapter 78, although such vessel has not commenced her voyage, or has come from, or is bound for, some place in the United Kingdom." In case of cholera, however, the ships are placed under the medical officer of health by a special order of the Local Government Board, but all other infected ships are visited by the medical officer acting for the Customs and may be placed in quarantine by him. Then, again, we have the 39 and 40 Vict., cap. 36, sec. 234, which confers on the Privy Council the power to prevent any person landing from a ship coming from a place infected with yellow fever or other infectious disease till the Customs have examined the state of health of persons on board and given permission to land. In case of disobedience a fine of £100 may be inflicted. Thus, while the local authority has, under the Public Health Act, all the necessary authority to inspect ships &c., we find that the Customs and the Privy Council may perform identically the same duty. Further, it should be noted that the local authority has the appliances necessary for disinfecting ships, for removing, isolating, and nursing patients. On the other hand, the Custom House officers have no such means. All they can do is to sign documents. They may put a ship in quarantine, but even in that case they must ultimately appeal to the medical officer of health to disinfect the ship before she can be released.

From these facts it will readily be gathered that there is a conflict of authorities; that two separate and different authorities—the local sanitary authority and the Custom House officers acting under the Privy Council—have to accomplish almost the same work or duty. It would be more simple and practical if the local sanitary authority were alone held responsible for the adoption of all necessary measures to prevent the importation of disease. At the same time it must also be acknowledged that a superior control should be exercised over local authorities. These latter are liable to be too subservient to local interests, and local interests are sometimes absolutely antagonistic to national interests. This is no reason, however, why two authorities should be appointed to do one and the same duty. In sanitary as in culinary matters "too many cooks spoil the broth."

Authority is not divided merely on land, but also at sea. The surgeons in charge of the ships are not brought into sympathy with the port sanitary authority. There is a fundamental defect in their position, for the companies themselves are allowed to appoint the surgeons in control of their ships. The interests of public health must inevitably come in conflict with the interests of the ship owners. Many ship owners, we readily recognise, have shown great liberality and willingness to do what was necessary, though at considerable pecuniary sacrifice to themselves. This, we maintain, places those companies which entertain conscientious scruples and manifest a high sense of public duty at a great disadvantage when competing with other

ship owners, who, on the contrary, are callous as to consequences so long as they can manage to avoid any supplementary outlay. If, however, the surgeon on board were quite independent of the proprietors of the ship and owed his appointment to the sanitary authorities, all ship owners would have to observe the same rules and standard of excellence. At present the surgeons are in great need of some form of protection to render them independent of the captains and owners. Such a reform would have for effect the introduction of a better class of surgeons into the service, and this would be a great advantage to the ship owners. Also it is urgent that the surgeons on board ships should be instructed to make full reports. If a member of the crew fall ill on the outward journey this is reported to the authorities at, say, New York, but at Liverpool nothing is known of the circumstance. The authorities at Liverpool are much in the same position as a person who is only allowed to read every other chapter of a book.

One of the gravest sanitary problems involved in the question of emigration relates to the injury that may arise from carrying cattle on board emigrant ships. This difficult question can best be studied at Liverpool, though it affects more or less all the other ports. The ship owners, we readily understand, are placed in a very difficult position. The tide of emigration flows exclusively in one direction. There are no emigrants to bring back from America. Yet ships cannot return with ballast. On the other hand, there is no exportation of live cattle to America, but, on the contrary, a very large importation of cattle from America. Hence, the emigrant ship on its return journey becomes a cattle ship. Diversity of opinion prevails as to the risks attending such a transformation. In Liverpool ships are detained in port for seven days, so that they may have more time to clean and purify the place occupied by the cattle. The cattle stalls are pulled down, the deck scrubbed, and disinfectants plentifully used. Thus when the ship is inspected it is free from odours. When once the ship is out at sea, the weather bad, and the side skuttles and the hatches shut down, the urine saturating the wooden deck of the ship commences to evaporate. Does the heat of the cabins under these circumstances cause the foulness that may possibly have been absorbed by the wood from the manure of the cattle to disengage itself and infect the air breathed by the emigrants? We have asked this question from several persons who have travelled on such ships, and, in general, the answers are not conclusive. If it is fine weather and every aperture is opened, then there is not much odour of any description in the emigrants' quarters. If it is bad weather, then so many emigrants are ill and so many repulsive odours arise in the steerage that it is impossible to qualify and make distinctions. Perhaps exhalations due to the recent presence of cattle add to the general unpleasantness, but potential odours of more pungent and recent date so affect the olfactory organs that anything like discrimination becomes impracticable.

To many, however, it will occur that experiments are hardly necessary to prove that wooden planks on which cattle have lived for from ten to fifteen days are hardly suitable as the flooring of human habitations. This becomes the more obvious when we take into consideration the fact, which several persons assured us was absolutely correct, that the cattle stalls are in many cases not cleaned during the whole voyage. The manure, on the contrary, is allowed to accumulate, because on reaching port it can be sold to agriculturists. For the sake, therefore, of a small pecuniary advantage a great nuisance is created. Others have argued that the boards of the decks are tarred over so that the wood loses its porosity and cannot therefore absorb any liquid. We do not, however, feel at all confident that this is done in every instance, and if this were thoroughly done the flooring of the deck would become extremely inconvenient when the passengers took the place of the cattle. Also, the cattle, with their bare hoofs, would soon kick and wear away the thin surface of coal tar that may be on the boards. From a sanitary point of view, and to be absolutely on the safe side, a rule or law should be enacted to the effect that passengers must not occupy that portion of the ship between decks which on the previous voyage was filled with living cattle. At the same time, we acknowledge that there may be very grave practical objections to any such enactment. The position of the ship owners with respect to the American carrying trade would have to be entirely revised, the cost of freight greatly increased, or the emigration and cattle service in part abandoned. Considering the commercial disturbance that such an enactment would occasion, we should be pleased if some other way out of the difficulty could be found.

At present, the only suggestion that occurs to us is that ships with iron decks should be employed for the cattle trade. Cattle, of course, cannot stand on a bare iron deck. It would be too cold, and they would slip and fall. The iron deck must be covered with boards; but these boards could be loosely put down, and easily taken up again. The iron, in any case, is impervious, and can be thoroughly cleaned by washing. The entire fittings belonging to the cattle being completely removed, and nothing but the iron shell remaining, there is no reason why, after due cleansing, other fittings should not be introduced, so as to convert the same space into a steerage cabin. This would certainly be less expensive than running separate ships for emigrants and for cattle. The success of such measures would depend on the rigour of their application—namely, the complete removal of all wood-work and the thoroughness of the cleansing. For the latter purpose, seeing that the scrubbing-brush may be applied with more or less energy, and is therefore more or less reliable, we would suggest, both from motives of economy and to ensure efficacy, the employment of superheated steam.

With the assistance of the local authorities we were able to visit a large number of ships at Liverpool, and in some of these excursions were accompanied by Mr. J. J. Brown, the port sanitary inspector. Mr. Brown holds the certificate of master, has been in command of large steamers and sailing ships, and is therefore thoroughly familiar with all that relates to shipping. As in the course of the year he inspects rather more than four thousand vessels, it is fortunate that the Liverpool port authorities have secured the services of an officer who has all the qualities of a sailor and commander. In company with Mr. Brown, we visited a ship called the St. Ronans, which had iron decks such as we have indicated above as suitable for cattle ships. The wooden flooring on which the cattle stood had just been removed, but then it appeared that the ship was to carry cargo, and not passengers, for the outward voyage. A little further we came upon a ship with a wooden deck which, on the contrary, was in the course of transformation from a cattle to a passenger ship. This change was effected in a very reprehensible and careless manner. A hospital had, for instance, been constructed on deck, and the boards for the flooring were laid down before the filth left by the cattle was properly washed away. At the far end of the cabin there was one board missing, so that we were able to look underneath, and there we saw just under one of the berths some liquid manure. A little later this would have been covered over by another board, and then it would be impossible to detect the defect; for, as a rule, inspectors do not insist on having the flooring pulled up to enable them to see underneath. Another ship we inspected had carried cattle between decks, and though it had remained in dock a long time undergoing repairs, the decks were still uncleansed. The law states that ships must be cleansed before cargo is taken on board; and, as no cargo was yet put on board, no one had troubled to clean the ship. This neglect may be in keeping with the letter of the law, but is certainly opposed to its meaning and spirit. The object is to keep ships clean and pure; and here manure, in a more or less liquid state, was allowed to remain for weeks on a porous wooden deck, so that it would sink deeper and deeper into the boards and render effectual cleansing a matter almost of impossibility.

Ships, we have already mentioned, are detained much longer in port than they used to be, so as to give full time for cleaning; but this wholesome regulation is avoided by taking less than fifty passengers. We came across a ship that had brought over a large quantity of cattle and was about to return to America within three days of its arrival. There was not time to ensure proper cleansing, and yet the ship could not be detained because she was to take less than fifty emigrants. This is a clause in the Emigration Act that must be totally repealed. Why should certain sanitary regulations be necessary when there are fifty emigrants, and not when there are only forty-nine? That this exemption works mischievously we had abundant evidence to prove when in Liverpool.

At Liverpool we also visited some of the largest Atlantic liners just as they were about to sail. On board the *Sardinia* of the Allen line we saw no less than 360 children, mostly the waifs and strays of our great cities, who were

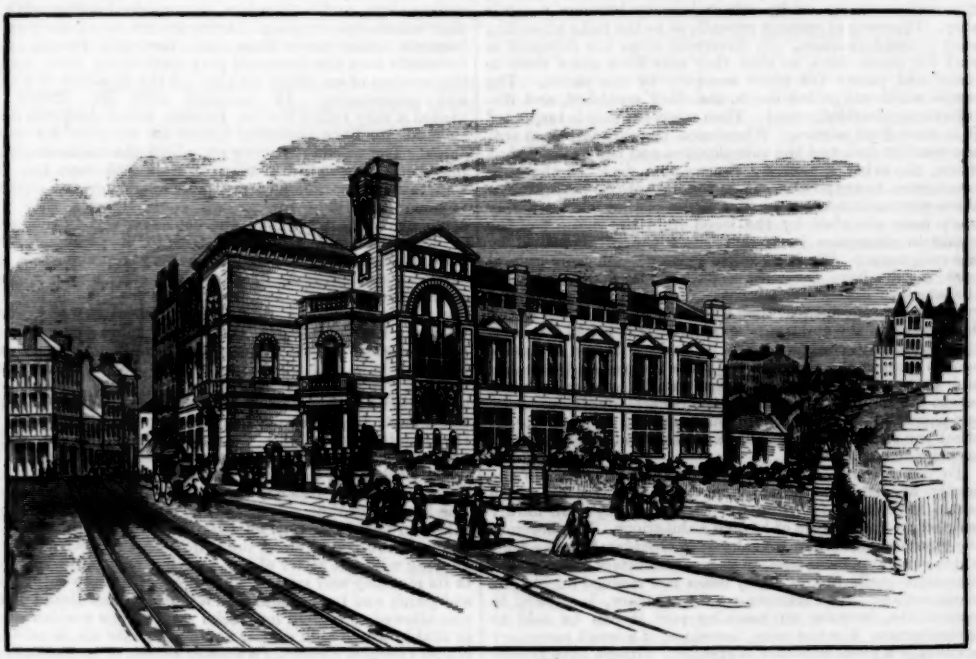
going to Canada in the hope of finding homes such as were unknown to them in the mother country. Each child had a comfortable berth, with a moose-hair pillow, and we were pleased to note the order, cleanliness, and discipline that prevailed on board. There were altogether over a thousand emigrants on this ship, together with a large number of first-class passengers. The closets were flushed with clean water at every stroke of the engine. On board the Cunard vessel *Servia* also the arrangements are admirable, and the spirit of enterprise that animates the directors of this great company is worthy of all praise. The *Servia* is one of the finest and largest ships afloat. It is an enormous shapely mass of steel, of 8500 tons burden, and no one can visit this wonderful floating city without realising that the possibilities of sanitary excellence are very different from what was contemplated when the clauses of our antedated Emigration Act were first framed.

ANDERSON'S COLLEGE MEDICAL SCHOOL.

THE annexed illustration shows the new building now in course of erection for the accommodation of Anderson's College Medical School, Glasgow. Since the adoption of the scheme proposed by the Commissioners under the Educational Endowments (Scotland) Act, 1884, the old "Anderson's University" has become merged in the "Glasgow and West of Scotland Technical College," while the Medical Faculty has become a separate and distinct institution, incorporated as "Anderson's College Medical School," under memorandum and articles of association. There is thus perpetuated the Medical Faculty, which dates back to the birth of Anderson's University, in the very beginning of this century. In 1800, Mr. John Burns commenced lectures on Anatomy and Surgery, which were separated into distinct lectureships in 1828; in 1819 Botany was added; and in 1828 the chairs of Midwifery, Materia Medica and Practice of Medicine were instituted, followed by Medical Jurisprudence in 1831, Theory or Institutes of Medicine in 1840, Ophthalmic Medicine and Surgery in 1869, Public Health in 1878, and Aural Surgery in 1879. As an extra-mural medical school Anderson's University has long held a foremost position, and has provided a medical education at a cost suited to the circumstances of many who would not otherwise have been able to prosecute the study of medicine. Dr. David Livingstone and other distinguished men adorn the roll of its students, who may be found in all quarters of the globe, in positions of usefulness and honour. Its class rooms have supplied no fewer than fourteen professors for Glasgow University, of whom six are at present teaching there.

The site obtained for the new buildings is situated in Dumbarton-road, near Glasgow University, and immediately to the west of the entrance to the Western Infirmary, one of the wings of which is seen in the illustration.

The new School will, it is expected, be ready for occupation in November, 1889. It provides all the accommodation which is usual in an institution of the kind. The dissecting room is placed on the second floor, and is entirely lighted from the roof. This room is connected with the basement by a hoist, by means of which the subjects are brought to the required level. On this floor are also the bone room and a small dissecting and preparation room. On the first floor are the anatomical museum and lecture theatre, private dissecting and operative surgery rooms, surgery and materia medica museums, library, professors' room, and a smoking room for the students. On the ground floor are placed the class rooms for chemistry, physiology, medical jurisprudence, medicine, materia medica, and midwifery, with the necessary professors' rooms; also the chemical, physiological, and medical jurisprudence laboratories, and a museum and laboratory of public health. The preparation rooms, furnace room, &c., are placed on the basement floor.



The elevation is Italian in style, and the building is intended to be roofed with red tiles. Considerable effect is gained by the treatment of the entrance and staircase. At the library there is a projecting stone balcony and balustrade; above the window of this room there will be a sculptured panel in the circular tympanum of the window.

As subscriptions are still being collected for the building, it is hoped on the part of the governors that all old Anderson's College students and other friends interested in medical education will recognise the claims of an institution whose continued prosperous existence without patronage or privilege argues not only intrinsic merit but public utility. The building, constructed on the best modern principles, and provided with all the appliances requisite for the conduct and management of a fully equipped medical school, will cost about £9000. The secretary and treasurer is Mr. John Kidston, 50, West Regent-street, Glasgow.

METROPOLITAN HOSPITAL SUNDAY FUND.

THE annual general meeting of the constituents of the Hospital Sunday Fund was held at the Mansion House on the 10th inst., the Right Hon. James Whitehead, Lord Mayor, President and Treasurer, in the chair.

Mr. CUSTANCE, the Secretary, having read the notice convening the meeting, the minutes of the last annual general meeting, held at the Guildhall, on Dec. 12th, 1887, were read and signed.

The LORD MAYOR, in opening the proceedings, expressed the gratification he felt in being president for the year of such a fund as the Hospital Sunday Fund, and assured the meeting that every effort would be made by him that its funds should not suffer in his hands. Beyond all question the distribution of the income was equitable, and he hoped that in the coming year it might be even larger than in the past.

Sir SYDNEY WATERLOW proposed that "the report of the Council for the year 1888 is hereby received and approved." He said that the report this year presented certain points for congratulation. In the first place, a larger amount of money had been distributed than in the previous year; and, secondly, a larger amount had practically been collected from the public, for the income last year had included a legacy of £1000 from the late Dr. Wakley. The distribution of surgical appliances, for which 4 per cent. of the income had hitherto been applied, was a most important branch of the Distribution Committee's labours. An adequate collection had not yet been taken on Hospital Sunday, and he urged the supporters of the fund to increased efforts.

The Rev. Dr. RIGG seconded the resolution, and remarked that the cause which they had met to support was one that commended itself to their acceptance, and that in the report there was nothing to cause dissatisfaction. Compared in population &c. with certain provincial towns, London was not doing what could be expected. Certainly since the establishment of the collection there had been a great increase in the amount received, but more was wanted to bear out the metropolitan character and to meet metropolitan wants.

The resolution was carried unanimously.

The Rev. J. SIMPSON then proposed that "the laws of the Constitution, which have been in force during the past year, be continued, except Law 12, in which the words 'four per cent.' shall now read 'five per cent.'" He said that the Council of the Fund unanimously recommended this resolution to the attention of the constituents. If adopted, a larger amount would be devoted to the purchase of surgical appliances, a result which was desirable, as more than six hundred applications were refused last year.

Canon INGRAM briefly seconded the resolution.

Mr. NELSON HARDY called attention to the fact that the laws of the constitution acted prejudicially to the poor of South London, which sent up one-fourth of the entire sum collected, but received back only one-twelfth. Guy's Hospital now had hundreds of beds vacant through want of funds, and in his opinion the case called strongly for help, not, however, on the lines of laws which he ventured to say were not framed in a spirit of justice to the whole of London. He concluded by warning the Council that, unless something was done to remedy the present state of things, the clergy and laity of South London would, when they found their contributions going to the rich West-end, cease to subscribe to the fund to such an extent as heretofore.

Sir SYDNEY WATERLOW said that the Council were of opinion that the fund was raised for the benefit of the whole metropolis, and that no alteration was desirable. The £520 which had been granted to Guy's Hospital was ten or fifteen times in excess of what would be allowed if the case of that institution had been calculated on the same basis as other hospitals.

Mr. JABEZ HOGG expressed his opinion that no injustice had been done to Guy's Hospital, and condemned Mr. Hardy's views on the subject.

The resolution was then carried unanimously.

The LORD MAYOR proposed that "the Council for the year 1889 be constituted as in 1888, with the following alterations—viz., the Rev. W. G. Pascoe in the place of the Rev. John McKenny, who has left London; the Rev. James Baillie in the place of the Rev. J. R. Wood, resigned; Sir Polydore de Keyser in the place of Mr. Alderman Whitehead, now Lord Mayor; and Mr. Samuel Hope Morley in the place of the late Major Ross, M.P.; and that the other retiring members be re-elected for 1889."

Dr. SEDGWICK SAUNDERS seconded the resolution, which was carried.

The Rev. Canon FLEMING, in the absence of the Bishop of London, proposed that "the 23rd day of June be fixed for Hospital Sunday of 1889, and that the cordial co-operation of all ministers of religion within the metropolitan area be again invited in the usual way."

This was seconded by Mr. ALLCROFT, and carried without dissent.

Mr. ALFRED COHEN then proposed that "sub-committees be formed, consisting of three leading members of the chief professions and banking and commercial firms in London, to canvass for donations among the firms, and that the result of these contributions be advertised under the respective heading of the profession or business—viz., the bankers' subscription, the Stock Exchange subscription, the Corn Exchange subscription, &c.; and that the President and the Vice-President be empowered to nominate gentlemen to serve on these sub-committees, and to carry out the objects of the resolution so as not to interfere with the objects of the Hospital Saturday Fund and donations to special hospitals."

The LORD MAYOR announced that a protest against this new departure had been received from the President and Treasurer of the Saturday Fund, but expressed the opinion that no ground of complaint existed.

Sir EDMUND HAY CURRIE seconded the resolution, which was carried unanimously.

Mr. CARR GOMM then proposed, and the Rev. Prebendary WHITTINGTON seconded, a vote of thanks to the Lord Mayor for presiding, which was briefly acknowledged, and the proceedings terminated.

PROFESSOR VON BERGMANN ON VON LANGENBECK.

THE lately-published volume of the Transactions of the German Congress of Surgery held at Berlin in April last contains the full text of Professor von Bergmann's admirable address in memory of the late Professor von Langenbeck. In that address he sketches the career of the great surgeon, who, as he said, did not belong to the discoverers and thinkers who have advanced our ideas in surgery, but whose fame rests upon the work he did for surgery in Germany, giving it a special stamp and direction. Contemporary with the great monarch whose loss they were then deploring, Langenbeck did for German surgery what Kaiser Wilhelm accomplished for the nation, and his influence would endure. For when he began life the surgeons of Germany stood far behind those of France and England; they did not originate, but simply availed themselves of the work done in other lands. That they now "take more than equal rank" with their western neighbours is largely owing to Langenbeck. Until the first decade of this century, there had been no German names which could equal those of Paré, Petit, Desault, Dupuytren, Cheselden, Pott, Cooper, or John Hunter; and even Dieffenbach gained his experience in France, and made his first important contribution on plastic surgery to a Paris society. The first independent German school of surgery was founded by von Kern in Vienna, the second by Langenbeck in Berlin. Langenbeck introduced the scientific element, owing doubtless to his early attachment to science, for his career opened as a *privat-docent* in physiology and pathological anatomy. Professor von Bergmann attributes considerable influence in determining Langenbeck's future course to a visit which he paid to England, where he became acquainted with Brodie, Lawrence, Henry Green, and Astley Cooper. He was struck with our hospital wards and with our Royal Medical and Chirurgical Society, which he subsequently took as a pattern for similar societies in his own country. This visit was also the occasion of the formation of a good understanding between German and English surgeons—a relationship evidenced in later years

in the nomination of Paget, Lister, and Spencer Wells to the honorary Fellowship of the Berlin Surgical Society, which Langenbeck founded. He always retained a cordial friendship with his English *confrères*, and was warmly welcomed on the occasion of his last visit in 1881, when the International Congress was held in London. Professor von Bergmann tells how Langenbeck, on his return from England in 1840, met Stromeyer at Erlangen, and how he definitely adopted surgery as his profession, being a few years after appointed to Kiel. He shows how his influence in the improvement of surgery was especially marked in three directions. The first was the cultivation of physiological science in its application to surgery. From his school have come many and important contributions on the histology of tumours, the development of bone, and regeneration of tissues; whilst some among his pupils—as Billroth and Hueter—have done much to pursue bacteriological studies and explain infective processes. Another new departure made by Langenbeck was in the extension of the field of operative interference. His own work upon the surgery of bones and joints, especially subperiosteal resections, was largely based upon the results of experiment; and the same is true of the wider and bolder extension to operations upon the larynx, the kidneys, intestines, stomach, and brain, in the furtherance of which his pupils have had a fair share of the credit due to the pioneer. Lastly, he reformed and reorganised military surgery. Some of his earliest experiences (in 1848-49) were in the battle-fields of Denmark, and it was during this troubled time that he was nominated to the Berlin chair in succession to Dieffenbach. He was Consulting Surgeon-General in the Danish war of 1864, and served again in 1870-71. To him is mainly owing the high state of perfection to which the care for the sick and wounded has been carried in the German army. But we must refer our readers to the address itself if they wish to read a worthy record of a noble life. Professor von Bergmann, who occupies the position vacated by von Langenbeck, was peculiarly fitted to deliver this address, which gives so clear an idea of what Germany's great surgeon was as a professor and as a man. In comparing the place formerly occupied by Germany in surgery to that it now holds, he could not, perhaps, have avoided the expression of pride at her present position in the van of scientific surgery; but he would be the last, we feel sure, to disparage the progress made in other countries. It is pleasant to find in the *éloge* a record of Langenbeck's love and admiration of British surgery, which we trust will be transmitted to his successors.

THE NEW SANITARY INSTITUTE.

THE address given by Sir Douglas Galton at the Sanitary Institute on the 6th inst. may be said to mark an epoch in the history of two institutions which have been devoted for some years past to the dissemination of sanitary knowledge. The amalgamation of the Parkes Museum with the Sanitary Institute of Great Britain has given us a new institution with the shorter title of the "Sanitary Institute." Of this institute the Parkes Museum is an integral part, just as the Hunterian Museum is a part of the College of Surgeons. This union is one of great importance, and must, we should think, vastly increase the influence for good of the two societies which henceforth are one.

By his address Sir Douglas Galton inaugurated the work of the new society, and this he did in the presence of a large and influential gathering of persons interested in the objects which the new body is intended to foster. The address dealt with the whole field of sanitation and with the work done and to be done. Certain passages of it were of very special interest. Thus on the question of education Sir Douglas Galton said:—

"It has become a burning question as to how both to compel the attendance of the poorer children at Board schools, and to ensure that they shall have received an adequate meal before they commence their brain work. This question has been solved in a sensible and practical way in Paris. In Paris primary education is free, and no fees have to be paid by the parents; but, inasmuch as it is compulsory, the authorities hold that it is directly to the interest of the community at large that the children should not only be forced to go to school, but that they should attend in such a physical condition as to be able to take advantage of, and not be injured by, the teaching. Parents in Paris who fail to send their children to school are not summoned before a police magistrate, they are required to give an account of themselves to the Commission Scolaire, which is composed of ordinary citizens in the arrondissement. If it is then found that the father and mother are really too poor to provide the children with proper clothes and boots in which to go to school, then such boots and clothes are at once provided for the children gratuitously. 'Cantines scolaires'—school kitchens—have been established in connexion with some of the schools, to provide meals for the children. For these meals the sum of ten centimes each (say a penny) is paid, the food being cooked on the spot. The distribution is managed in this way. Each child goes up to the teacher in turn, and receives its ticket in return for its penny. If, however, any child is too poor to be able to pay the penny, the teacher is informed of this beforehand, and the poor children receive their tickets in precisely the same way and at the same time as those whose parents have been able to pay for them, nor is it known to their companions that they are in receipt of free meals. The education of a mental kind now being supplied will be imperfect, and may be dangerous, unless it be so combined with physical culture that a perfect, or comparatively perfect, health of body shall go with it."

On the important question of cooking, the following interesting facts were submitted:—

"Sanitary science, having taught us to select our diet, further leads us in the next place to prepare it for use. We have still much knowledge to spread respecting the science of cookery. I do not say to learn, because nearly one hundred years ago the subject of cookery was scientifically investigated by a man who began life as a poor schoolmaster, who became a great general, a great statesman, a great scientific man, who was Dictator and Governor of Bavaria for a while. Benjamin Thompson, better known as Count Rumford, investigated cookery, and applied the science of cookery to the art; for great as he was in war, great as he was in statesmanship, that which he evidently regarded as his greatest triumph was his economical cookery—the fact that he fed the poor of Munich, the beggars, thieves, and vagabonds which abounded there to a fearful extent, for less than a penny per day with good, nutritious, and appetising hot food. The daily dinner provided by him at the House of Industry for 1200 persons, each receiving a portion weighing twenty ounces, cost altogether £1 15*s.* 2½*d.*, about one-third of a penny each—$\frac{333}{1000}$ of a penny exactly. Count Rumford was the founder of the Royal Institution of Great Britain, whose charter dates from January 13th, 1800. As a portion of this large project, the founder of that institution had in view something closely similar to what the Parkes Museum has attempted to realise. Mere descriptions, he knew, were insufficient to interest and instruct the public. The public demanded something visible and tangible, and he therefore proposed that the Royal Institution should be made a repository for models of all contrivances and inventions which are calculated to promote the health, comfort, and general well-being of rich and poor. His list embraces all the objects which we have at heart, as well as the diffusion of knowledge therein by means of appropriate lectures. As regards these technical objects, the scheme of Count Rumford did not succeed; though, thanks to the genius of the great men who have been its professors, the Royal Institution has flourished in other directions. We hope to succeed where Rumford failed: because, first, the scheme of the Council is a more manageable one; secondly, because public opinion has been acted on since Count Rumford's time by that period of latency, that process of permeation, which was wanting in Rumford's case. Public education in sanitary matters has reached a level that makes the Parkes Museum answer to a public demand. It is the direct outgrowth of public needs, and will, we trust, as such, enjoy a permanence greater than it could enjoy as a cut-and-dried institution superimposed upon the public."

Sir Douglas Galton gave a summary of the work done previously to amalgamation. This has consisted in (1) the examining of 630 candidates; (2) the giving of regular systematic courses of lectures to inspectors of nuisances, which have been attended by numbers progressively rising from 65 at the first course to 114 at the last; (3) the giving

of demonstrations to medical students and others by professors who have had the Museum freely placed at their disposal for that purpose; (4) the giving of a general course of lectures to the public; (5) the holding of congresses and exhibitions at Exeter, Newcastle, Glasgow, Dublin, Leicester, York, and Bolton; (6) the formation of the Parkes Museum, which has been much assisted by the judges of the exhibitions; (7) the formation of a library, which is already one of very considerable dimensions, and is in many respects unique; (8) the publication of a volume of Transactions every year since 1880; (9) the publication of Dr. Farr's "Vital Statistics"; and (10) the publication of Sir John Simon's "Health Reports." This summary of work done is most creditable, and augurs well for the future. Funds are needed, and, although the Institute pays its way, it cannot adequately fulfil its functions without a considerable augmentation of income. The advantages of the Sanitary Institute are sufficiently great to ensure a progressive increase in its members; but for its full development the "pious founder" is needed, and we have no hesitation in recommending the new Sanitary Institute to the consideration of large-minded philanthropists.

THE BRITISH NURSES' ASSOCIATION.

ON Friday, the 7th inst., the Grosvenor Gallery was the scene of a festivity, unique of its kind and most interesting. The British nurses celebrated the first anniversary of their Association by a conversazione, at which were gathered nurses from all parts of the United Kingdom, each wearing the uniform of her hospital, and with these mingled many well-known members of the medical profession, with their wives and daughters, and many of the lay public, friends of the nurses, or their invited guests. The guests were received by Mr. Savory, acting by command of H.R.H. Princess Christian in her unavoidable absence, and Miss C. J. Wood, one of the hon. secs. of the Association. Among the names announced were those of the Lord Chancellor and Lady Halsbury, the Countess of Shrewsbury, Lady Hamilton Gordon, Sir Rutherford and Lady Alcock, Sir Sydney Waterlow, Sir Edward Sieveking, Sir Alfred Garrod, the Hon. Mrs. Stuart Wortley, Mr. and Mrs. Jeune, Dr. and Mrs. Priestley, Dr. and Mrs. Robert Barnes, Mr. and Mrs. Stephen Ralli, Mr. Ford North, Mr. Thomas Smith, Mr. and Mrs Meiggs, Dr. and Mrs. Edis, Dr. and Mrs. Bedford Fenwick, Miss Jones of Guy's Hospital, Miss Stewart of St. Bartholomew's Hospital, Miss Beachcroft of Lincoln County Hospital, Miss Cureton of Addenbrooke's Hospital, Cambridge, Miss Medill of St. Mary's Hospital, Miss Lumsden of Aberdeen Infirmary, and many other matrons from the London and provincial hospitals, with about 600 sisters and nurses, in all numbering about 1000 guests. One of the most pleasing features of the evening was the opportunity afforded to nurses trained in the same hospitals, but scattered by their work in all directions, to meet on common ground and renew old recollections; it was eminently a social evening, and was also very felicitous in bringing the two professions into unofficial intercourse. Besides the Pastel Exhibition, which was a treat in itself, a varied musical programme had been provided by the kindness of friends, in which such names as Mrs. Stanley Stubbs, Mrs. Hancock, Madame Amaury, Mr. J. Robertson, and Mr. Dykes were a guarantee as to the high order of music performed for the enjoyment of the nurses and their friends; and then Mr. Corney Grain gave one of his inimitable musical sketches, which was thoroughly appreciated by his audience. In one of the galleries there was a small exhibition of nursing appliances, sent from St. Bartholomew's, King's College, Charing-cross, Royal Free, Victoria, and Sick Children's Hospitals, also from Messrs. Maw and Son, and Messrs. Allen. Some of the splints and antiseptic dressings showed a marked advance in the neatness and finish of trained work in hospitals, and there were many evidences of the care and thought now given to the comfort of the sick in the articles exhibited on the tables. Victoria Hospital exhibited a very handy ward dressing-stand, and King's College showed an operating table that could be adjusted to any height, shape, or position; both these articles, we understand, owe their special features to the lady superintendents of the institutions. Messrs. Maw and Son exhibited some improved medicine measures, which were marked so distinctly as to be easily read in a dim light; they also had some very good-shaped dressing trays, an improved feeding-bottle, and many other useful adjuncts for nurses. Messrs. Allen exhibited their kettles, and a serviceable little model of the arrangement of a hot-air or vapour bath in bed. There was also a model of a bed with a movable frame for raising the patient; this, we believe, was the contrivance of a lady. The Metropolitan Nurses' Association exhibited a very compact and useful nurse's bag for district work, and we also noticed some fracture splints on the Charing-cross stand, and some special dressings from the Royal Free Hospital.

The whole evening was a great success, and is a striking proof of the vigour of the Association. The programme put into the hands of the visitors, which, by the way, was a gift from the proprietors of the *Nursing Record*, states that the Association has many benevolent schemes in prospect for nurses, besides its main object of obtaining a Royal Charter; and we can only hope that they will have all the help they need in carrying these through.

MEMORIAL TO THE PRESIDENT AND COUNCIL OF THE BRITISH MEDICAL ASSOCIATION.

WE have been requested to publish the following additional and final list of signatures to the above memorial:—

Sir H. W. Acland, K.C.B.
Dr. John Anderson.
Mr. Thomas Bell.
Mr. W. H. Bull.
Dr. Brace.
Mr. Edward Berry.
Mr. W. H. Bennett.
Sir James Crichton Browne.
Mr. W. G. Burnie.
Dr. William Bruce.
Dr. C. A. Beevor.
Dr. Thomas Browne.
Mr. B. E. Brodhurst.
Mr. John C. B. Burroughs.
Mr. Samuel Benton.
Mr. Howard Barrett.
Dr. Richard Budd.
Mr. Alfred Burton.
Dr. William Cayley.
Dr. Herbert J. Capon.
Dr. John Clarke.
Mr. Kiallmark.
Mr. George Cowell.
Mr. J. Duncan Duncan.
Dr. W. H. Russell Forsbrook.
Dr. J. Fitzpatrick.
Dr. Garrod.
Dr. W. S. A. Griffith.
Dr. S. Gourley.
Mr. Victor Horsley, F.R.S.
Dr. Habershon.
Dr. Francis Hawkins.
Sir Prescott Hewett, Bart.
Dr. Heron.
Mr. Christopher Johnson.
Dr. Lewis Lewis.
Mr. Hooper May.
Mr. Howard Marsh.
Mr. Henry Marshall.
Mr. C. H. Newby.
Mr. E. Nettleship.
Dr. J. D. Powell.
Dr. Julius Pollock.
Dr. Partington.
Mr. Bernard Pitts.
Mr. T. Laurence Read.
Mr. George Rice.
Dr. J. Rankin.
Dr. C. West Symes.
Mr. James C. Sinclair.
Dr. Sharkey.
Mr. George Shipman.
Dr. Gilbart Smith.
Professor Thane.
Mr. W. J. Trentler.
Dr. McNeill Whistler.
Mr. William H. Webb.
Mr. T. H. Whatson.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF INSPECTORS OF THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

Diphtheria at Dingestow, by Mr. SPEAR.[1]—The Dingestow registration sub-district lies north and north-west of Monmouth, and contains 4920 inhabitants, scattered somewhat widely over sixteen parishes, personal intercourse between some of them being very close. Indeed, in Dingestow, Tregare, and Penrose, where diphtheria has recently prevailed, a large portion of the inhabitants were found to be nearly related, either by birth or marriage, and often by both. This locality has been regarded as one of the

[1] Eyre and Spottiswoode, East Harding-street, E.C.; Adam an Charles Black, Edinburgh; and Hodges, Figgis, and Co., Dublin.

healthiest in the union, but in two recent years Dr. Willis, the medical officer of health, has reported the prevalence of sore-throat, the complaint being looked upon not only as erythematous or follicular tonsillitis, but as having a distinct history of phlegmonous tonsillitis and "quinsy," the affection tending especially to affect members of the same family, and being locally looked upon as subject to hereditary predilections. But in the last four months of 1887 seven cottages in Dingestow were invaded with what appeared to be true diphtheria, besides other attacks from sore-throat. Then again, early in 1888, four families in Tregare had diphtheria, as also two in Penrose, there being in these two latter groups probability of connexion with the earlier attacks. From this district there seems to have been a spread of the disease to Llanvihangel and to Ragland. As to the origin of the Dingestow diphtheria, the evidence is very meagre, and does not call for much comment. The principal defect in the cottages invaded was dampness associated with drainage defects. In all, there were 15 family invasions, 30 cases, and 7 deaths. Summarising the evidence which was forthcoming, it appears that true diphtheria of the severe croupous variety prevailed in the three parishes named. Contrary to common experience, the disease was but little associated with aggregation of children in school, adults suffering disproportionately, and under circumstances that are regarded as suggestive of some other cause for their infection than personal contact. Some considerations bearing upon this latter point are stated to have been handed in to the Medical Department of the Local Government Board; but, by reason perhaps of their being as yet unsupported by other similar experience, they are not published. Other cases of sore-throat, "croup," and some probably diphtheritic attacks were heard of in other parts of the Monmouth rural district, and in dealing with them Mr. Spear has occasion to point to the unsatisfactory sanitary state of many of the parishes visited, a state which he is inclined to think can only be remedied as the result of a large amount of detailed work, and which should call forth a much more detailed and systematic system of supervision, with a view to a more minute application of the work of improvement which is required.

Small-pox in the St. Joseph's Industrial School, Manchester.[2]—Dr. Page has now submitted to the Local Government Board his report on the outbreak of small-pox amongst the inmates of St. Joseph's Roman Catholic Industrial School, concerning which questions were a short time since asked in the House of Commons. A large portion of the report is given to a very detailed discussion as to the relation of vaccination to the outbreak amongst the inmates, who were 172 in number. It is assumed that all these may have been exposed to the infection up to the day when the disease was detected, and when a general revaccination was instituted. Ten had never undergone vaccination, and of these 5 were attacked and 5 escaped; in 6 cases vaccination was doubtful, no scars being detected, and of these 2 contracted the disease and 4 escaped; there were 148 children and members of the staff who had been vaccinated in infancy, of whom 51 contracted the disease and 97 escaped it; and, lastly, there were 8 who are stated to have been revaccinated some months or years before, and one of these is believed to have had an attack, while 7 escaped. The severity of the disease in these several groups is also shown in tabular form, of which the following is a summary. Of those unvaccinated up to July 27th, when the disease was discovered, and who were 10 in number, 5 escaped small-pox, the other 5 suffered from the confluent form of the disease, and 3 died. Of those with doubtful vaccination at this date 4 escaped, the 2 others suffering from the disease in a semi-confluent form, but without fatal results. Of the 148 who had been vaccinated at some time or another there were 51 attacks, and amongst these no death occurred; in 40 cases the amount of eruption varied from a single spot to fifty, 8 had discrete attacks with more than fifty spots, and 3 had semi-confluent attacks. The one person out of the revaccinated who is believed to have had small-pox exhibited one single spot. The story of importation is next discussed by Dr. Page; it is somewhat obscure, and presents no features of general interest. The lessons to be learnt from the outbreak are—the need for much more medical supervision of such establishments, the extreme infectiousness of even the most trivial attacks of small-pox, and the necessity for comprehensive measures of revaccination at about ten years of age. As to the infectiousness of small-pox, a quotation from Marson is given as follows: "Most likely it is communicable from the moment when the initiatory fever begins. It may be given by the breath of the patient before the eruption has appeared on the surface of the body," and "a mild case may, and often does, give rise to a severe one; and, on the contrary, a severe case may produce a mild one." Few passages could, in a more striking way, show the imperative necessity for resorting to revaccination at a definite period of life, and this without waiting for the imminence of infection. In the actual case before us the disease was not at first recognised, and a very large number were attacked before the eruption was definitely shown to be small-pox. It only remains to add that ample and excellent hospital accommodation was available the moment the disease was recognised, 67 patients being removed to Monsall Hospital.

[2] Eyre and Spottiswoode, East Harding-street, E.C.; Adam and Charles Black, Edinburgh; and Hodges, Figgis, and Co., Dublin.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Saint Pancras.—The corrected death-rate for this important metropolitan parish during 1887 was 19·98 per 1000 living, the extremes, according to sub-districts, being 18·5 in Regent's Park and 24·2 in Somers Town. The zymotic rate was slightly below that for London as a whole, and amounted to 2·95 per 1000. It is worthy of note that, with a population of 243,100, not a single death from small-pox occurred, this being the first year on record for which this can be said. During the year 504 cases of scarlet fever were notified, and of these 287 were removed to the hospitals of the Asylums Board. Sanitary work was also carried on by way of disinfection, and, in addition to dealing with 445 infected rooms, a very large number of articles of bedding, clothing, &c., were passed through the disinfecting stove. Dealing separately with the various conditions calculated to affect the health of the district, Dr. Sykes refers to the question of sewer ventilation, and he expresses the opinion that the proper solution of the difficulty is likely to be found in a system of pipes carried above the house-tops, and, in a few exceptional instances, by the use of lamp-posts and pillars as ventilating shafts.

Leicester Urban District.—Leicester had an exceptionally low death-rate in 1887—namely, 19·0 per 1000, or 2·1 below the average for the past ten years. The infectious diseases notified were 898 in number, as opposed to 1280 in the previous year. And of the 898 no less than 308 were erysipelas, mostly of a trivial character. Of the remainder, 272 were scarlet fever, 222 typhoid fever, 81 diphtheria, and 9 small-pox. As regards small-pox, isolation, quarantine of infected families, and vaccination are still resorted to; an infected family over the borough boundary, and outside Leicester, being dealt with by the urban authority as if in the borough. The unvaccinated children in each case reported were vaccinated, and revaccination, when deemed necessary, was performed on adults. In referring to this, Dr. Tomkins takes occasion to point out how recent is the local war against vaccination, and he shows that by far the majority of the Leicester children are vaccinated, no less than 1122 infants having been vaccinated there as recently as 1886. Diarrhœa is dealt with at some length in the report, and Dr. Tomkins points out that the watering of several streets twice a day with water impregnated with disinfectants was followed by a marked and undoubted diminution in mortality, although he is not yet prepared absolutely to show that the one was the effect of the other. Having regard to the difficulties met with as to sewer ventilation, some prominence is given to two inventions that have been the subject of experiment in Leicester. One is Keeling's sewer gas destructor, in which, at the base of a lamp-post for example, sewer air is conveyed to a powerful Bunsen burner, which heats a series of iron cones sufficiently to serve as a cremator to sewer air. It is reported of it that it certainly makes sewer-air odourless, and that it to a great extent, if not entirely, destroys the germs of bacterial life contained in it. The other apparatus was invented by Dr. Paulson of Mountsorrel, and is admittedly as yet only in the stage of experiment in so far as construction is concerned.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5817 births and 3359 deaths were registered during the week ending Dec. 8th. The annual rate of mortality in these towns,

which had been 19·7, 18·2, and 17·8 per 1000 in the preceding three weeks, rose again last week to 18·6. During the first ten weeks of the current quarter the death-rate in these towns averaged 19·5 per 1000, and was 1·7 below the mean rate in the corresponding periods of the ten years 1878-87. The lowest rates in these towns last week were 9·2 in Derby, 13·0 in Birkenhead, 13·1 in Sunderland, and 14·7 in Bristol, Hull, and Preston. The rates ranged upwards in the other towns to 23·6 in Liverpool, 24·8 in Plymouth, 26·3 in Blackburn, and 29·8 in Cardiff. The deaths referred to the principal zymotic diseases, which had been 501 and 526 in the preceding two weeks, were again 526 last week; they included 277 from measles, 70 from scarlet fever, 50 from whooping-cough, 48 from diphtheria, 41 from diarrhœa, 40 from "fever" (principally enteric), and not one from small-pox. No deaths from any of these zymotic diseases were recorded last week in Hull, Plymouth, Wolverhampton, or Halifax; while they caused the highest death-rates in Salford, Blackburn, and Cardiff. The greatest mortality from measles occurred in London, Leicester, Portsmouth, Leeds, Oldham, Salford, Liverpool, Blackburn, and Cardiff; from scarlet fever in Liverpool, Sheffield, Derby, and Blackburn; from whooping-cough in Birmingham and Cardiff; and from "fever" in Cardiff and Salford. The 48 deaths from diphtheria in the twenty-eight towns included 35 in London, 3 in Nottingham, 2 in Birmingham, 2 in Salford, and 2 in Newcastle-upon-Tyne. No death from small-pox was registered in London or in any of the twenty-seven other great towns. No small-pox patients were under treatment during the week in the Metropolitan Asylum Hospitals or in the Highgate Small-pox Hospital. The number of scarlet-fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital was 922 at the end of last week, against 980, 953, and 946 on the preceding three Saturdays; 79 cases were admitted to these hospitals during the week, against 59 and 96 in the previous two weeks. The deaths referred to diseases of the respiratory organs in London, which had declined in the preceding six weeks from 522 to 258, were last week 277, and were 210 below the corrected average. The causes of 86, or 2·5 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Leicester, Portsmouth, and in five other smaller towns. The largest proportions of uncertified deaths were registered in Preston, Halifax, Sheffield, and Bradford.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 17·8 and 19·1 in the preceding two weeks, further rose to 19·3 in the week ending Dec. 8th; this rate exceeded by 0·7 the mean rate in the twenty-eight large English towns. The rates in these Scotch towns ranged from 13·6 and 15·4 in Dundee and Leith to 26·3 in Greenock and 32·0 in Paisley. The 487 deaths in the eight towns showed a further increase of 4 upon the numbers returned in the preceding two weeks, and included 12 which were referred to scarlet fever, 11 to diphtheria, 8 to measles, 8 to diarrhœa, 7 to whooping-cough, 3 to "fever" (principally enteric), and not one to small-pox; in all, 49 deaths resulted from these principal zymotic diseases, against 53 and 60 in the preceding two weeks. These 49 deaths were equal to an annual rate of 1·9 per 1000, which was 1·0 below the mean rate from the same diseases in the twenty-eight English towns; this rate ranged in the eight towns from 0·0 in Leith to 7·4 in Greenock. The fatal cases of scarlet fever, which had been 6 and 13 in the preceding two weeks, were last week 12, of which 10 occurred in Glasgow. The 11 deaths from diphtheria showed a further slight increase upon the numbers in the previous two weeks, and included 7 in Glasgow and 3 in Greenock. The fatal cases of measles, which had declined in the preceding four weeks from 27 to 14, further fell last week to 8, of which 4 were returned in Greenock and 3 in Glasgow. The 8 deaths attributed to diarrhœa were 5 below the number in the corresponding week of last year. The 7 fatal cases of whooping-cough corresponded with the number in the previous week, and included 5 in Glasgow and 2 in Edinburgh. The 3 deaths from "fever," of which 2 occurred in Greenock, were fewer by 8 than the number in the previous week. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 97, 90, and 86 in the preceding three weeks, rose last week to 113, but were 30 below the number in the corresponding week of last year. The causes of 50, or rather more than 10 per cent., of the deaths registered during the week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 25·9 and 22·9 per 1000 in the preceding two weeks, rose to 27·0 in the week ending Dec. 8th. During the first ten weeks of the current quarter the death-rate in the city averaged 24·4 per 1000, the mean rate during the same period being 18·6 in London and 15·5 in Edinburgh. The 186 deaths in Dublin showed an increase of 28 upon the number in the previous week; they included 8 which were referred to "fever," one each to measles, scarlet fever, diphtheria, whooping-cough, and diarrhœa, and not one to small-pox. Thus the deaths from these principal zymotic diseases, which had been 20, 12, and 11 in the previous three weeks, rose again last week to 13. The deaths referred to "fever," which had been 3, 5, and 6 in the preceding three weeks, further rose last week to 8. The deaths of infants showed an increase upon the numbers returned in recent weeks, while those of elderly persons had further declined. Six inquest cases and five deaths from violence were registered; and 56, or nearly a third, of the deaths occurred in public institutions. The causes of 32, or nearly 18 per cent., of the deaths in the city were not certified.

Correspondence.

"Audi alteram partem."

EXAMINATIONS IN OPERATIVE SURGERY.

To the Editors of THE LANCET.

SIRS,—In the article which appeared in your issue of the 24th ult. on the question of retaining operative surgery as one of the subjects on which candidates for the joint diploma of the Royal Colleges of Physicians and Surgeons should be examined, reference is made to the views of Mr. Teale, Professor Gairdner, and myself, which were published in the report, made on behalf of the General Medical Council, on the examinations (1881-82) of the medical and surgical corporations of the United Kingdom. In that report not only is the importance of the test recognised, but also the dissatisfaction of the Visitors with the arrangements at the Royal College of Surgeons for carrying it out is sufficiently indicated. It appears that the Visitor of the present year, Professor E. H. Bennett, has also expressed, in his recently published report, dissatisfaction with this part of the examination, and apparently as a consequence of these unfavourable opinions the question has now been boldly raised as to whether this subject should form any part of the final examinations for surgical diplomas.

From the tone of Mr. Rickman Godlee's letter published in your last issue, I infer that he has ranged himself on the side of those who would abolish the test. His arguments, however, are hardly convincing. One of the statements made by him is that in courses of operative surgery "only the best men attain anything like familiarity with the use of the knife." Of this I have much doubt; but assuming that it was true, surely a similar remark might with equal justice be made as regards the progress made, as a rule, by students engaged at other practical courses, such as those of anatomy, physiology, and histology. And yet Mr. Godlee would not, I presume, advocate that the teaching and examination in these important subjects should on that account cease. Again, he considers that "nervousness" in a candidate is more conspicuous at an operative surgery examination "than at any other time." This does not coincide with my experience. When "nervousness" apparently influences injuriously the prospects of a candidate, it is, as a rule, the direct outcome of insufficient preparation. Lastly, Mr. Godlee alludes to what he has often observed to be a characteristic of some examiners—viz., that they are specially liable to be dissatisfied if candidates are not familiar with particular methods of operating which they (the examiners) prefer, although the ones the candidates select to perform may be as good as, or perhaps better than, those they are expected to adopt. In answer to this, I would say that if any examiner is found to be a faddist

he is obviously unfitted for his post, and the sooner his services are dispensed with the better.

Although I can quite understand that much difficulty may arise in efficiently carrying out an examination in operative surgery when an extremely large number of candidates have to be tested, I cannot think that it is insuperable, and it is only if it were so considered that would at all justify the question being raised as to whether it is desirable that the test should be enforced. Having regard to the importance of operative surgery, which has made such giant strides of late years, the abolition of the test at the examinations for surgical licences would, in my opinion, be calamitous to the best interests of surgical education. It is stated that the dearth of subjects is one great difficulty, and that their utilisation for this purpose may injuriously affect the teaching and study of practical anatomy. Assuming, however, that between 500 and 600 candidates presented themselves annually for the final examinations of the Conjoint Board in London—and that is probably a large estimate,—I would say, from my experience as an examiner, that for such a number twenty-four subjects would probably be found quite sufficient; and having regard to the facilities with which they can now be procured, there could hardly be much difficulty, in a city with such an exceptionally large population as London has, in getting the required number, or even a much larger one if necessary. Then I understand that the time required to conduct this part of the examination is found to be a source of trouble and difficulty to some of the examiners who are believed to be favourable to the abolition of the test. If this be the case, I would suggest one of two courses—viz., either the appointment of other but equally efficient examiners who perhaps may have more leisure at their disposal, or of assistant supplemental examiners. That it is desirable there should be a practical test in this branch of our art is a proposition which, I think, hardly admits of discussion. Examinations are, as Professor Humphry has said, "the despots of education"; and we may reasonably anticipate that the abolition of the test would be promptly followed by the cessation of systematic teaching of operative surgery, and any surgical curriculum without this would, in my opinion, be distinctly defective. I regard it as one of the most important branches of surgical education, as it gives opportunity not only for the development of manual dexterity in operating, but also for the study of the surgical indications for its many and various applications.

I have known of more than one instance in which a surgeon, a few days after obtaining his surgical qualification, was called upon and required to perform operations of the most serious kind, and without having the advantage of any skilled assistant. In these cases, if the manipulative skill and knowledge derived from the study of operative surgery had been wanting, the results would, in all probability, have been very disastrous. There is one point which I think should never be lost sight of, and that is the desirability of candidates being tested for the most part on operations of emergency. In this opinion my friend Mr Teale, I know, coincides. It is satisfactory to note that in the recent debate on this subject in the General Medical Council, not only did Mr. Teale express himself strongly as regards the importance of the operative surgery test, but had coinciding with him surgeons of such eminence as Sir J. Simon, Sir George Macleod, and Professors Humphry, R. Macnamara, and C. Heath.

I am, Sirs, yours faithfully,

WILLIAM STOKES,
Professor of Surgery, Royal College of Surgeons, Ireland.
Merrion-square, Dublin, Dec. 10th, 1888.

MENSTRUATION AND THE OVARIES.

To the Editors of THE LANCET.

SIRS,—It is perfectly true that Dr. Aveling was the first to use the word "nidation"; but, whilst we are grateful to him for the invention of this most convenient term, we are not now inclined to follow him in the useless purpose to which he puts it. The very fact that Dr. Aveling uses the phrase "meaningless and unscientific Fallopian theory" conclusively proves, what is the fact, that he has not in the least understood my letter, and therefore I need not discuss the matter further with him. Dr. Harry Campbell, on the contrary, clearly observes the point at issue, and believes, in connexion with it—and I agree with him entirely,—that ovulation in all probability is a necessary part of the menstrual rhythm. The only point upon which we differ is that he desires to retain the belief that ovulation and menstruation are concurrent and coincident. If this were so, we should have, in either post-mortem or ante-mortem examination of the ovaries, a definite number of ripe, ripening, and decadent follicles proportionate to the methodical order of the performance of menstruation. But everyone knows that it is not so. In a statistical account of all the available information which my operations have enabled me to tabulate, and published in the *Medical Times and Gazette* and in the *Gynæcological Journal*, it is clearly shown that the proportion of ripe ova to menstrual periods does not give more than two or three ripe ova in a year. It is, therefore, for Dr. Harry Campbell, who believes that ovulation and menstruation are coincident, to advance a single fact or observation which will support his view. It is not sufficient merely to reiterate what has been handed down from generation to generation without proof when the statement is challenged, and it is this traditional belief in the concurrence and coincidence of menstruation and ovulation which is at the bottom of all the fallacies of the physiology and pathology of the ovaries.

De Sinety and Melassez, and numerous other observers, have shown that ovulation is going on during the whole of life; menstruation occurs only over a limited part of it. There is one crux which faces the supporters of the ovular theories, but they have passed it by (as Dr. Aveling has done) without a word. Another fact quite as conclusive is that menstruation is never interfered with by any disease of the ovaries; whereas disease of the tubes and uterus (and not mere occlusion, but any disease of the tubes, or almost any disease of the uterus) will alter menstruation, may increase or diminish it, may convert it into continuous metrorrhagia, or cause it entirely to disappear. This is perfectly parallel with all the facts known to us about the influence of disease upon function. If the kidneys are diseased, they influence the function of the secretion of urine, because they are its immediate agency. If ovulation be the cause of menstruation, or the ovaries be its immediate agency, then disease of these organs should show distinct evidence of their power. Removal of one should diminish it by half, unless the remaining ovary gets hypertrophied; and removal of both should entirely suppress the function. But no such results are obtained. We are further asked to believe that the retention of a microscopical fragment of one organ will lead to the maintenance of the complete physiological function attributed to two in their entirety. It is like asking us to believe that a man could pass fifty ounces of healthy urine from a remainder of one kidney, say, weighing ten grains—an assumption too absurd for further discussion.

I am, Sirs, your obedient servant,

Birmingham, Dec. 1st, 1888. LAWSON TAIT.

"THE BRITISH EMIGRATION SERVICE."

To the Editors of THE LANCET.

SIRS,—I observe in THE LANCET of Nov. 24th last a report by your Special Commissioner on the British emigration service. In that report he refers to an emigrant depôt, and remarks that the waste-pipes from the fixed washing-stands there communicated directly with the drains, afterwards qualifying this by saying that there was no trap visible. I would like, in justice to our watchfulness and strict supervision of all those places, to inform you that the whole system has been thoroughly smoke-tested lately by the officers of this department, and no trace of smoke was discoverable on the premises. As a matter of fact, all the washing-stands referred to *are* trapped, and easily accessible by removing a portion of the woodwork. The other two w.c.'s, situated in the centre of the building, have two small hinged windows opening into the staircase. They are not any darker than such closets generally are when they are situated near the centre of a building or dwelling house, as unfortunately too many of them are. I would like to point out to your commissioner that every closet situated within a dwelling house is ventilated through the dwelling house, and not the dwelling house through it, unless special mechanical apparatus be employed to cause an up current, which of course, as you are aware, no one has power to enforce. Such a question as this presents "no difficulty in *enforcing*," as suggested by your reporter.

The difficulty is that there is no law about it at all. The question of fresh effluvia emanating from a w.c. into a dwelling house and contaminating the air of it, to the injury of health, is a matter on which doctors widely differ, as they sometimes do on more vital questions.

I am, Sirs, yours faithfully,

PETER FYFE,

Sanitary Department, Glasgow, Dec. 5th, 1888. Sanitary Inspector.

THE NEW WAY OF RAISING THE EPIGLOTTIS ETC. BY UTMOST MANUAL EXTENSION OF HEAD AND NECK, AND THE RECENT ADJOURNED DISCUSSION.

To the Editors of THE LANCET.

SIRS,—In the accurate report in THE LANCET of the 24th ult. of the recent adjourned discussion at the Medical Society of London appears an apology from me made under false impressions, and which is so inconsistent with the title of my paper, "On a new and only way of Raising the Epiglottis," that I must beg a short space in your valuable columns for a correction.

On reference to the report of the adjourned discussion, it will be seen that, although Mr. T. C. Bryant, of Guy's Hospital, who had been kind enough to watch some of my work at the time, said "the facts submitted were supported by demonstrations upon the dead body," and that "he was quite prepared to endorse Dr. Howard's remarks, or most of them"; while Sir William Mac Cormac related a recent case of his own exactly corroborating these facts; though Mr. Lennox Browne related an experience which "supported Dr. Howard's contention"; while Mr. Knowsley Thornton said, "Dr. Howard had a perfect right to speak of his way as a *new* method;" and though during the entire discussion not a single point as to the facts or their alleged purport was for a moment in dispute;—notwithstanding all this, in the body of my closing remarks will be found a very complete apology from me for having apparently overlooked the claims of a prior or contemporaneous worker on similar lines, and robbed him of the credit due to him. This apology was elicited by a surprise, and was given without reflection, in consequence of an impressive speech to that effect generously made by Mr. Knowsley Thornton on behalf of a friend who had been notified of the coming discussion, but was absent. The complaint in question was based upon a "paper" in the *Edinburgh Medical Journal* —a proposed instrument in that connexion—and a case. On an examination since, I find not one of these things mentioned in the index of the journal in question, and that no such "paper" or abstract of such a "paper" is there published. As regards the case, it seems to have been reported specially to illustrate the relative superiority of my own method of artificial respiration, which, in contrast to Silvester's in another case mentioned, seems to have been employed with striking success on that occasion.

These events do not date back ten years ago as stated. The quotations made in support of supposed claims were, I find, made correctly, not from a "paper," however, but from *remarks* made at meetings on May 5th and on July 7th respectively in 1880. The case—the experience in which seems to have been the source of whatever followed at subsequent meetings—was described in the course of a discussion some months before, or on March 5th, 1880. On that the earliest occasion or event referred to by Mr. Thornton's friend, he is reported in the *Edinburgh Medical Journal* to have said: "He had the greatest faith in Howard's method, and related this case to show how efficient it is in urgent cases of asphyxia, however produced." A recognition of the value of head and neck extension long ago by Mr. Thornton's friend seems correct, for, in accordance with my old directions for *passive* extension, he said: "Two pillows were placed under the shoulders, and the head allowed to fall well back, when "the air rushed into the chest in a manner delightful to observe." Further: "He mentioned this case to show the great value of a particular method of artificial respiration in a case of greatest urgency, where, as in this case, e.g., the patient could not be moved," for "he had no hesitation in saying that Howard's method saved the patient's life." I by no means wish to be understood as making a complaint myself, but as I privately promised Mr. Thornton I would make even further public correction as the facts on examination might seem to allow, I cannot excuse myself from doing so, simply because the nature of the correction is so very different from what I was so ready to think it would have to be. Between these facts and what I was led for the moment to suppose them to be the discrepancy is unfortunately great and amazing. In view of the facts, my apology is so absurdly contradictory and misleading, I have no choice but to retract it.

I hope I shall be excused for having recalled some of the forgotten statements made at the time in the account of the above case, the report of which was both new and interesting to me, and for the results in which Mr. Thornton's friend, as well as myself, cannot, I am sure, but feel grateful. I am, Sirs, yours faithfully,

London, Dec. 6th, 1888. BENJAMIN HOWARD.

SIR MORELL MACKENZIE AND THE ROYAL COLLEGE OF PHYSICIANS OF LONDON.

THE Registrar presents his compliments to the Editors of THE LANCET, and will feel obliged by their insertion in the next issue of the journal of the following letter which appeared in *The Times* of the 12th inst. (to-day):—

To the Editor of The Times.

Sir,—The following paragraph appeared in the second edition of the *Pall Mall Gazette* of the 8th inst.:—

"George Fitz-James Darker, M.D., F.R.C.S., of St. Thomas's Hospital, who was present at the conclave at the College of Physicians when the decree to boycott Sir Morell Mackenzie was drawn up, writes as follows: 'At that meeting I (in company with five or six others) protested against the decision arrived at—namely, to advise our colleagues in Edinburgh not to recognise Sir M. Mackenzie's visit to that city. I consider this boycotting of an eminent medical man a mean and cowardly action, and unworthy of the profession to which I have the honour to belong.'"

The answer to this statement is full and conclusive. 1. No question relating to Sir Morell Mackenzie has been discussed by the College of Physicians. 2. No meeting of the College has taken place since Oct. 25th last. 3. No communications have passed between this College and any other corporate body or persons on the subject. 4. Dr. Darker is quite unknown to the College, and could not have been present at any meeting whatever of that body, had such taken place; moreover, his name does not appear on the Medical Register.

There is, therefore, no foundation whatever for the paragraph quoted, which appears to have been designed for some other purpose than the furtherance of justice and truth.

I am, Sir, your obedient servant,

HENRY A. PITMAN, Registrar.

Royal College of Physicians, London, S.W., Dec. 11th.

LIVERPOOL.

(From our own Correspondent.)

THE PREVENTION OF CRUELTY TO CHILDREN.

MR. JUSTICE WILLS, in charging the Grand Jury at the Assizes now sitting here, referred to the valuable assistance afforded by the Society for the Prevention of Cruelty to Children in taking up cases where there appeared to be gross parental neglect. Although the Society has been in existence some years and its formation was followed by that of a similar society in London, the learned judge stated that he had never heard of it before. The Society acts in a double capacity, not only as public prosecutors in cases where cruelty by commission or omission has been proved, but also in deterring others from committing similar offences.

TYPHOID FEVER AT ST. HELENS.

For some time past there has been a severe epidemic of typhoid fever at St. Helens, several leading inhabitants having fallen victims to it, while others who have been infected are happily recovering. Dr. Garton, who has been in attendance on some of the patients, was himself taken ill, but this appears to have been from overwork.

DEATH OF THE MAYOR OF BIRKENHEAD.

Within a month of being elected to the office of Mayor of Birkenhead, Mr. Frederick Smith, alderman of that borough,

has died a victim to the zealous discharge of his duties. Nearly three weeks ago he went to London on civic business with every appearance of robust health. In returning home he caught cold; but instead of taking the necessary precautions to prevent further ill consequences, he continued to discharge the duties of his office until a week before his death, when he was attacked by congestion of the liver, followed by an attack of congestion of the lungs. In spite of every care and attention he sank and died, in his forty-third year.

Liverpool, Dec. 11th.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

THE CONVICT WADDLE.

A PETITION has been forwarded to the Home Secretary on behalf of William Waddle, who is at present lying at Durham Gaol under sentence of death for the Birtley murder, and whose execution is fixed for Tuesday, the 18th inst. The petition is presented by a brother of the convict, and sets forth "That the prisoner is one of a family all of whom are more or less eccentric in manner, and he has one brother who is at present, and has been for the last seven years, confined as a lunatic in the county asylum of Bracebridge, near Lincoln." The reason for such confinement was repeated wanderings without purpose or object by the lunatic. It is stated further in the petition that the convict had also on one occasion prior to the evening of the murder departed from his home, apparently without object, and that this occurred in September, a year before the murder. It also states that it was given in evidence that the prisoner, although of a morose and quiet character, was otherwise a kind and well-behaved young man. The petition asks for an investigation of the prisoner's state of mind, and offers to give any information as to his antecedents. It is to be hoped that this petition may be favourably answered. There is much in Waddle's conduct to give rise in most minds to doubts as to his sanity, and it would be felt as a reproach to law and justice if this sentence on a supposed lunatic were allowed to be carried out without the fullest inquiry as to his state of mind.

AMBULANCE WORK IN THE COUNTY OF DURHAM.

The ambulance movement makes steady progress in the north, especially in the districts where "first aid" is likely to be most needed at our large collieries and iron works. At Consett, under the direction of Dr. George Renton, more than 200 students have joined.

THE SEASON IN THE NORTH OF ENGLAND.

The weather in the north certainly deserves a passing note, as, during the first week of this month, it has been warmer and milder than it was in any part of June last. Primroses and other spring flowers are coming into bloom. Mushrooms have been gathered, and the apple has been observed in bloom in the Tyne valley. During the past three days the temperature has fallen and frosts have set in at nights; but, if not so warm, the weather is exceptionally fine, with much sunshine for the period of the year. Our local weather prophets have been all wrong, as they predicted just the reverse.

LARGE PHOSPHATIC CALCULUS IN A HORSE.

A calculus like a cannon ball was taken from the carcase of a horse last week at Hexham. It weighed 3lb. 10oz., and was above 15 in. in circumference. The horse was twenty-five years old, and accustomed to take long journeys.

Newcastle-on-Tyne, Dec. 12th.

EDINBURGH.

(From our own Correspondent.)

SIR MORELL MACKENZIE IN EDINBURGH.

THE appearance of Sir Morell Mackenzie in Edinburgh has been followed by a pretty quarrel between the professors in the medical department on the one hand and the *Scotsman* and *Evening Dispatch* and the students on the other. Without going into detail, a short account of what has occurred may be given. Sir Morell Mackenzie was invited to give a lecture on "Speech and Song" at the Edinburgh Philosophical Institution. This fact came to the knowledge of some of the members of the Students' Representative Council, who immediately made arrangements to ask the lecturer to give an address in aid of the building fund of the new University Union. Everything was arranged, but at the students' address none of the medical professors were present. Next day the *Scotsman* and the *Evening Dispatch* very injudiciously drew attention to the fact, and published long articles on "Medical Boycotting." This was followed by small sections of students in the various classes making it clear, by certain signs of disapprobation, that they thought they were better qualified to judge on points of medical ethics than were their seniors. Some of the professors treated the whole matter as a joke, and managed to laugh it off. Others took it more seriously, and one dismissed his class for the day. One cannot but think that the lay papers were not very wise in drawing attention to the action of the professors. They have surely a right to absent themselves from any meeting at which they do not wish to be present without being called to account either by the lay journals or by the students. They did not, surely, object to the students doing as they wished, and it is only fair that they (the professors) should be allowed to exercise a similar discretion. It must be remembered, too, that on the evening on which the address to the students was delivered there was an important meeting of the Medico-Chirurgical Society, at which many of the leading physicians and surgeons were present. It is to be hoped that the matter will now be allowed to drop, and that the former amicable relations between teachers and taught will soon be restored. In this connexion, it may be mentioned that a very large number of the students made a counter demonstration on each occasion and at each class.

A JUDGE ON MEDICAL EVIDENCE.

Lord Fraser, in addressing a jury in a case arising out of the injury to a man sustained by the fall of a gangway, used some rather remarkable language in characterising the evidence of the medical witnesses engaged. He stated that he dismissed from consideration the whole of the evidence given by one of the witnesses, and he did so "from his bearing in the witness-box. It was too intemperate and passionate. It was not the evidence of a witness, but the evidence of a partisan. He was the man who was sent on Jan. 13th, for the purpose of ascertaining—for the purpose of defence—the extent of the injury that the workman had received. He was the sleuth-hound of the company." Later his lordship remarked that "these doctors always amazed him with the confidence with which they expressed their opinions. Dr. ——," naming a well known medico-legal expert, "is a man very highly respected, a friend of my own; I have often heard him as a witness, but I never heard him express a doubt about anything in his life — never." This sally was naturally followed by laughter. When did a Court fail to laugh at a judge's joke? So encouraged, his lordship went on to improve on his first effort. "He is quite clear and sure upon everything, even as to prophecy." After such a tirade, the last thing one would expect would be a prophecy from Lord Fraser. In this we are mistaken, for he immediately dons the mantle that he has so ruthlessly torn from the doctor's shoulders, and states that "the man would never, unless through a miracle, be as strong as he had been before, and be fit for heavy labour." So much for judicial consistency.

Edinburgh, Dec. 11th.

DUBLIN.

(From our own Correspondent.)

ROYAL ACADEMY OF MEDICINE IN IRELAND.

AT a meeting of the Pathological Section held on the 7th inst, Mr. Kendal Franks exhibited the patient from whom he had removed five inches of colon for epithelioma. Brief details of the operation were referred to in THE LANCET of Nov. 17th (p. 984), and it may be mentioned that Gély's suture was used. Mr. Dallas Pratt described a rare accident —viz., a case of lateral luxation of the ungual phalanx of the thumb. Mr. Franks gave interesting details of a case of cholecystotomy, the first of the kind reported in Ireland. A tumour on the right side, which some thought might be

of a malignant nature, proved, when the abdomen was opened, to be an enlarged portion of the liver, which passed vertically downwards from the right lobe. The patient was greatly improved, but a fistulous opening remained, and little or none of the bile passed into the duodenum; and Mr. Franks was of opinion that this was owing to a stricture of the common bile duct.

CITY OF DUBLIN HOSPITAL.

On the 19th inst. an amateur dramatic performance will be given at the Gaiety Theatre in aid of the funds of this excellent institution. The play selected for the occasion will be Robertson's "School," and the performance will be under the patronage of the Lord-Lieutenant and the Marchioness of Londonderry and Prince and Princess Edward of Saxe-Weimar.

QUEEN'S COLLEGE, CORK.

By the lamented death of Dr. Denis O'Connor a vacancy has arisen in the chair of Practice of Medicine in this College. The candidate, who will be elected by his Excellency the Lord-Lieutenant, in whose hands the appointment lies, will hold office for a period not exceeding seven years. The emoluments of the post are about £150 per annum.

EPIDEMIC OF FEVER IN CO. CORK.

It is reported that an epidemic of typhoid fever prevails in Schull district, in the county Cork, where malignant measles recently existed and proved so fatal. Some thirty persons have been removed to hospital, and the cases which have succumbed include, among others, those of two Roman Catholic clergymen.

ADELAIDE HOSPITAL.

Miss Reynolds, who for some years past has held the post of lady superintendent to this hospital, was on Saturday last presented with an address and testimonial by the nurses and students on the occasion of her departure from the institution. The nurses gave a gold watch and chain with a suitable inscription, and the students a dressing-bag and hospital dressing-case.

DUBLIN MAIN DRAINAGE.

A member of the Town Council has given notice of motion to the effect that, as the present condition of the main sewers of Dublin is and has been for some years injurious to the health of the inhabitants, they should, without further delay, be put into proper order by the Corporation. He suggests that the subject be referred to a committee of the whole house, with powers to appoint a sub-committee to carefully inquire into the matter, and report to the Council with the least possible delay.

The epidemic of typhus fever which recently prevailed in the Strokestown Union has now disappeared, and the medical officers of the district have at present no cases of the disease under treatment.

Dublin, Dec. 11th.

PARIS.

(From our own Correspondent.)

ACTION OF CHLORIDE OF ETHYLENE.

PROFESSOR BOUCHARD, at the meeting of the Academy of Sciences last week, recalled the recent researches of M. Raphael Dubois, relative to the singular action of chloride of ethylene on the eye when inhaled as an anæsthetic. It has the unfortunate property of having a selective action on the eye, rendering the cornea opaque. Animals submitted to its action become blind. M. Dubois attributed this effect to a dehydration of the cornea. Dr. Panas, Professor of Clinical Ophthalmology, was authorised to verify the facts advanced by M. Dubois. He obtained the same results—viz., thickening and opacity of the cornea; but he differed in opinion with M. Dubois as to the cause of the phenomenon. It is not, said Dr. Panas, by the withdrawal of water that the cornea becomes opaque; it is by the distension and desquamation of its epithelium.

CAUSES OF DEPOPULATION.

Among the causes of the depopulation of France referred to in my letter of last week, I may mention the enormous mortality among nurslings. According to a report recently laid before the Chamber of Deputies, 150,000 is the number of infants dying annually in France from improper or premature feeding and misery. Whilst the number of births does not attain 900,000, the number of deaths that occur in the first year after birth is, on an average, 230,000, including 45,000 stillborn. In this last figure are not comprised miscarriages or abortions. The author of the report remarked that the evil seems to increase in proportion to the improved circumstances of the people. For instance, from 1840 to 1870 the percentage of infantile mortality rose from 15·9 to 24·7.

INTESTINAL OBSTRUCTION BY LINSEED.

Dr. Polaillon lately brought to the notice of the Academy of Medicine a curious effect of linseed, which is frequently prescribed in grain for obstinate constipation. He had under his care a young woman in good health, but habitually constipated, who took daily for three months a tablespoonful of linseed in grain. At the end of this time she showed symptoms of intestinal occlusion, and after complete constipation, lasting for a week, it was found necessary to make an artificial anus, whereby an enormous quantity of linseed escaped. Notwithstanding this relief, the patient continued to sink, and died seven days after in a markedly typhoid state. Dr. Polaillon recalled a similar circumstance reported by Professor Verneuil, which had been produced by fig-seeds. He thinks that in his own case surgical intervention was too late, and that the woman had succumbed to stercoræmia. *Apropos* of this, Dr. Berger recalled what takes place in animals which ingest these same products without bruising them, and of which they easily disembarrass themselves. He had seen guinea-pigs fed with Indian corn in grain; their intestines filled like a sack of wheat, and they continued ingesting until the bowel was ruptured. It is probable, says the *France Médicale*, from which I have taken this note, that these differences between man and animals depend on the nature of the secretions.

ECTOPIA CORDIS.

M. Franck lately brought to the notice of the Academy of Sciences a case of ectopia of the heart in a woman of Colmar, on which he makes the following reflections: "It is known that, according to Mosso, the jugular pulse is the result of an aspiration exercised by the heart, at the moment of the diastole, on the intra-thoracic liquids. In this patient, the heart not communicating with the thorax, there can be no aspiration, and consequently there can be no jugular pulse if the theory of Mosso is correct. This is not the case, as in this instance the jugular pulse presents in this patient its habitual characters, which proves that this pulse is due, as demonstrated by Dr. Potain, to the brusque falling in of the auricle at the moment of the systole. Another interesting peculiarity is that there exists in this woman, between the first and the second normal sound of the heart, a dull bruit which nearly coincides with the commencement of the systole. This third sound must be attributed to the brusque tension of the ventricular wall determined by the afflux of blood. There exists, moreover, at the base of the heart, a *bruit de souffle* presenting all the characters of so-called anæmic murmurs. It is alleged that these sounds had for their seat the pulmonary artery. In this patient, the position of this vessel is such that there can be no doubt as to the anæmic nature of this bruit and its seat of production at the level of the aortic orifice."

DEATH OF A PASTEURIAN PATIENT.

The *Semaine Médicale* of last week reports that a lad aged fourteen years, bitten by a rabid dog on May 29th, 1888, and treated at the Pasteur Institute from June 7th to July 1st, died from rabies on Nov. 2nd.

Paris, Dec. 11th.

ROME.

(From our own Correspondent.)

IN spite of building operations not always in good taste, Rome is already proving attractive to a more than usually large number of visitors. Social reasons, with the English-speaking colony especially, combine towards this result. The new Ambassador, Lord Dufferin, is invariably a *persona grata* not in the diplomatic world alone; and Lady Dufferin, with the suavity and grace that blend so happily with her native-born tact, seems peculiarly well fitted to preside

over a community reinforced from so many various quarters as that of her Anglo-colonial compatriots. Recent events, not only in the British Islands, but in connexion with the visit of the German Emperor, have brought to the front a series of questions which must make Rome, whether at the Vatican or the Quirinal, the centre of those high political transactions which possess such a charm for the holiday-making publicist of all nationalities. Add to this the never-failing interest of treasure-trove, historic and artistic, to which the much-abused architectural innovations are constantly contributing, and you have an *ensemble* of attractions—extending or enhancing those of which nothing can rob the Eternal City—more than sufficient to explain the influx of arrivals already thronging hotel and *pension* from the Campus Martius to the Alta Semita, from the Subura to the Prætorian Camp.

Happily free from the small-pox visitation which has scared away so many foreigners from the Neapolitan and Sicilian "sun-traps," Rome is at present salubrious to a gratifying degree. At the close of the autumn, it is true, malaria continued to number sporadic cases in the environs and in the Campagna; but since the late showers these have steadily diminished, and such as still occur are mainly accountable as relapses among the victims to the "cachexia malarica." In the more densely inhabited or central quarters there have been traces of the fever; but these, again, have been due to importation from the low-lying plains or shore lands, where the febrile seeds have been contracted, only to crop up in town. "With respect to the different manifestations of the malaria infection," says the sanitary registrar of the Commune, "the pernicious and subcutaneous forms were, even in October, scarce and always on the decrease; while those complicated with local and acute inflammations were few indeed. Only in the latter third of the month was there a slight rise in malarial pleurisy and pneumonia"—due, no doubt, to the overcrowding of the city during the Emperor's visit, and the necessity imposed on so many of remaining too long in the open, or even of bivouacking *sub Jove frigido*.

Gastro-intestinal catarrh during all October was, however, rather more prevalent than usual, and this of a more or less acute and obstinate character. The explanation given above—that of overcrowding and exposure—for the increase in pleurisy and pneumonia is hardly relevant to the catarrhal manifestation, as it was as serious in the first third of the month, before the influx of foreigners for the imperial *feste*, as after the shrinkage of the population to its normal limits. On the other hand, cases of such infective maladies as typhoid fever, diphtheria, measles, and anthrax were exceptionally rare; but erysipelas marked, particularly about the middle of October, a slight rise, only, however, to subside again to its usually low dimensions. Rheumatism, muscular and articular, was almost conspicuous by its absence, the gratifying record in this class being, on the other hand, balanced by a perceptible augmentation in the bronchial catarrhs and partial pneumonias always more or less induced by the steady rains which mark the transition from summer to autumn. There again, however, the 150,000 arrivals (such is the received estimate) about the middle of the month doubtlessly imported the conditions under which these lung affections increased during the latter third.

Nervous diseases of all kinds, according to the sanitary registrar of the Commune, were very few in October, and this satisfactory report has since been more than maintained; while the same may be said of chronic maladies—such as cardiac ailment or pulmonary tuberculosis on the one hand, or chloro-anæmia, hepatic cirrhosis, or uterine cancer on the other. The vigilance with which the hygienic conditions of Rome are now watched may be taken as a measure of her anxiety to retain the attractions she has always had for the northern pilgrim, and the gratifying records of the last two months are a proof that her efforts are not put forth in vain.

Vigilant, however, she must never fail to be, if the bad traditions—the laxity, the negligence, the apathy bequeathed by the old *régime*—are not sometimes to assert themselves disastrously. Under the heading of "Delizie Ferroviarie" (railway delights), the *Tribuna* announces that a day or two ago, while the up-train from Naples was stopping at Cecchina, within some ten miles of Rome, five gentlemen got into a second-class compartment from which, to their horror, three peasants, all ill with small-pox, and one of them, indeed, very seriously so, had just been taken. It was in vain that the in-coming passengers protested to the guard against such an outrage on the travelling public. Their protestations were disregarded, and they had to pursue their journey to Rome a prey to the most disquieting anticipations. On reaching the Roman terminus, they were subjected to a sanitary inspection, and, this concluded, they lodged a strongly worded remonstrance with the "Direzione generale." Certainly, such a flagrant breach of good faith with the railway-faring community would not be tolerated in England, still less if the management were vested, not in a company, but in the State.

Rome, Dec. 1st.

THE SERVICES.

WAR OFFICE. — Coldstream Guards: Surgeon-Major Ernest H. Fenn has been seconded for service on the Personal Staff of His Excellency the Marquis of Lansdowne, G.C.M.G., Viceroy and Governor-General of India (dated Nov. 8th, 1888).

ARMY MEDICAL STAFF.—Surgeon-General Henry Bolton Hassard, C.B., has been granted retired pay (dated Nov. 29th, 1888); Surgeon-Major John Alex. Campbell has retired on temporary half pay, on account of ill-health (dated Nov. 19th, 1888); Surgeon John P. Carmody, M.D., has retired on temporary half pay, on account of ill-health (dated Nov. 29th, 1888).

ADMIRALTY. — The following appointments have been made:—Deputy Inspector-General Wm. H. Lloyd, M.D., to Hongkong Hospital (dated Dec. 8th, 1888); Surgeon Alfred T. Rimell to the *Amphion* (dated Dec. 11th, 1888); Mr. Joseph F. Mannix to be Surgeon and Agent at Cahirciveen; Mr. Thomas G. Millerick to be Surgeon and Agent at Ballinskelligs and Waterville; Richd. B. Wrighton, M.D., to be Surgeon and Agent at Orfordness, in addition to Aldeburgh, Sizewell, and Thorpe; and Staff Surgeon H. W. D. Walsh to the *Devastation* (dated Dec. 11th, 1888).

VOLUNTEER CORPS.—*Rifle:* 1st Inverness-shire: Captain N. Reid resigns his commission (dated Dec. 8th, 1888).—2nd Kent: Lieutenant-Colonel and Honorary Colonel E. Hughes resigns his commission; also is permitted to retain his rank, and to continue to wear the uniform of the Corps on his retirement (dated Dec. 8th, 1888).—3rd Kent (Royal Arsenal): Captain H. A. E. de Pinna, from the 2nd Kent Artillery Volunteer Corps, to be Captain (dated Dec. 8th, 1888).—2nd Volunteer Battalion, the Suffolk Regiment: J. Hodges, Gent., to be Acting Surgeon (dated Dec. 8th, 1888).

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AT an ordinary meeting of the Council held on Thursday, Dec. 13th, the minutes of the ordinary meeting on the 8th were read and confirmed.

On the recommendation of the Museum Committee, Mr. Burgess is to be employed as an artist and photographer for the purposes of the museum, at a salary of £3 for four days of six hours each per week for a period of three months commencing from January next.

It was also resolved that certain gentlemen, "in reply to their respective applications for permission to make use of the College work-rooms, be informed that the Council are not in a position to permit the carrying on of any investigations which may involve experiments on living animals, or the retention of living animals, on the College premises, or to defray any expenses incurred in connexion with such experiments made elsewhere, but that the Council would be ready to afford them facilities for pursuing at the College such part of their investigations as may be carried out in accordance with the regulations relating to the use of work-rooms."

The report of the Committee of Management of the two Colleges, recommending that the possessor of the Diploma in Public Health be called Diplomate in Public Health, and that certain alterations be made in the schedule of drugs relating to the examination in materia medica and pharmacy, was approved, adopted, and entered on the minutes.

The following report of the Committee on the question of

an examination in operative surgery for the Membership was approved and adopted:—The Committee have to report that, having considered the question in all its bearings, they do not think it desirable at present that candidates for the Membership of the College should be examined in Operative Surgery on the dead body.

The motion, proposed by Mr. Macnamara and seconded by Sir Spencer Wells, that the report be again referred to the committee for reconsideration, to further report to the Council, was lost, 8 being for and 14 against it. The recommendation of the committee was then carried by 14 to 2.

The President reported on behalf of himself and the Vice-presidents that the Morton and Bradshawe Lectures had been duly delivered by Sir Spencer Wells and Mr. J. Hutchinson respectively. The best thanks of the Council were given for the lectures, which the authors were requested to publish. The thanks of the Council were also given to Mr. J. Marshall for his very efficient services as representative of the College in the General Medical Council, and his report as to the proceedings of that body.

The President, Vice-Presidents, and Mr. Marshall were appointed as representatives of the College in a joint committee with four representatives of the Royal College of Physicians, with authority to act on behalf of the two Colleges in determining the necessary modifications of the original plans for the new building on the Embankment.

The following notices of motions were given:—1. By Sir Spencer Wells: That the resolution of the Council of May 8th, 1884, that an annual meeting of the Fellows and Members be called, to which a report from the Council be presented, be rescinded; and that the annual meeting of the Fellows and Members be discontinued. 2. By Sir J. Paget: That a conversazione be held at the College at some convenient date during the coming summer, and that a small committee be appointed to make arrangements for such. 3. By Sir W. MacCormac: That a certificate be required from candidates for the diploma of Member of the College of having themselves performed operations on the dead subject to the satisfaction of their teachers of Practical Surgery. 4. By Mr. Macnamara: That the President be requested to communicate with the Secretary of State for War in favour of dating commissions of medical officers from the time of their joining Netley.

The following gentlemen were elected examiners under the Conjoint Scheme:—*First Examination:* Elementary Anatomy—Messrs. C. A. Ballance, W. Bruce Clarke, Arthur Hensman, W. A. Lane, and Charles Stonham. Elementary Physiology—Messrs. W. D. Halliburton and F. W. Mott. *Second Examination:* Anatomy—Messrs. W. H. Bennett, J. N. C. Davies-Colley, R. J. Godlee, and F. H. Marsh. Physiology—Messrs. C. H. Golding-Bird, B. T. Lowne, and J. M'Carthy. *Third Examination:* Midwifery—Drs. W. Duncan, W. S. Griffith, G. E. Herman, and J. B. Potter. *First Professional Examination for the Fellowship:* Anatomy—Messrs. W. Anderson, W. H. Bennett, R. J. Godlee, Henry Morris, and Frederick Treves. Physiology—Messrs. C. H. Golding-Bird, B. T. Lowne, J. M'Carthy, and G. F. Yeo.

Obituary.

JAMES GUTHRIE, M.D. QU. UNIV. IREL., L.R.C.S. EDIN.

IT is with regret we have to record the death of Dr. James Guthrie, which took place at Esher, Surrey, on the 28th ult., at the early age of thirty-eight. Dr. Guthrie's medical education was commenced in Belfast, where he was a diligent and earnest student, and in 1874 he graduated M.D. in Queen's University, Ireland, having in the previous year obtained the L.R.C.S. Edin. Even at this early date he had cause to fear the great enemy which was ultimately to conquer, and with a view to building up a store of health he took several sea voyages, which proved most beneficial. In 1877 he married and settled in Esher, where his kind and amiable manner, seconded by his professional ability and keen knowledge of human nature, soon secured him a large number of friends, who up to the last had hoped against hope, and who now mourn as for a brother. Dr. Guthrie was an Irishman, and all the truest and best traits of the Irish character were to be found in him. Kind and generous to a fault, amongst all his large circle of friends he never forgot those of his college days, who were to the last his dearest. His mind was keen as his heart was warm, and his professional knowledge was wide and sound. He took the greatest care to keep abreast of the times. Even after he had given up active work, and was awaiting his departure from the present scene of his labours, he took a lively interest in all that was going on in the world of scientific medicine. His body was interred at Esher on the 5th inst., and was followed to the grave by a a large concourse of all classes, rich and poor alike desiring to do honour to the memory of one they had loved and respected.

JAMES HALL, M.B., C.M. EDIN., L.R.C.S.

THE numerous friends of the above-named gentleman will learn with much regret of his death, which took place from phthisis, at the comparatively early age of forty-three, at his residence, Bolton-le-Moors, Lancashire, on Nov. 5th. His university education he received at Edinburgh, where he distinguished himself greatly, obtaining many class prizes and honours, and graduated at the age of twenty-two, having made many friends, both amongst men of science and others. Refusing the offers made to him by some of these gentlemen, he preferred starting practice in his native town of Bolton-le-Moors, where he quickly acquired an extensive connexion, his skill and ability being very speedily recognised. His death in that town will long be deplored, especially amongst the poor, by whom he was greatly beloved, since his sympathies for them were very keen, and his generous and hospitable nature ever ready to come to their aid in times of need. Much sympathy is everywhere felt for his family, and the respect in which he was held was testified by the immense number of floral wreaths which came from different parts of England and Scotland, also by the large number of medical and Masonic brethren and other friends who attended his interment, which took place in the family vault at Walmsley. He leaves a widow and five children—one son and four daughters.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following candidates, having passed the necessary examinations on Nov. 20th, 21st, 22nd, and 23rd, were, at a meeting of the Council on the 13th inst., admitted Fellows of the College:—

Adams, John, L.R.C.P.Ed., Aldersgate-st.; Membership dated July 25th, 1872.
Brodie, C. G., L.R.C.P.Lond., Harley-street; Jan. 24th, 1883.
Codd, A. F. G., Melrose-terrace, W. Kensington-pk.; April 18th, 1882.
Coombe, R., L.R.C.P.Ed., Devon and Exeter Hospital, Exeter; July 23rd, 1886.
Deakin, James, L.S.A., Gt. Ormond-street; Jan. 20th, 1870.
Douglas, C., L.R.C.P.Lond., New Walk, Leicester; Nov. 19th, 1873.
Gooddy, E. S., L.R.C.P.Lond., Lambeth Palace-rd.; Oct. 30th, 1885.
Johnson, R., M.B.Lond., Gower-street; July 31st, 1885.
Lucy, R. H., M.B.Ed., College-yard, Worcester; May 4th, 1886.
Rawes, W., M.B.Durh., Newcastle-under-Lyne; Aug. 3rd, 1883.
Spicer, W. T. H., M.B.Cantab., Bedford-square; Jan. 24th, 1884.
Stabb, E. C., L.R.C.P.Lond., Vincent-square; July 28th, 1886.
Taylor, A. E., M.B.Lond., Norwood House, Southall; July 29th, 1884.

Thirty-one candidates presented themselves for examination, of whom sixteen passed, including three candidates who have not yet attained the legal age (twenty-five), and fifteen were referred.

The following gentleman, who passed the necessary examinations on May 25th, 26th, 27th, and 28th, 1887, having attained the legal age of twenty-five years, was also admitted a Fellow of the College:—

Rowell, George, L.R.C.P.Lond., Guy's Hospital; Membership dated July 21st, 1886.

The following gentlemen having passed the necessary examinations and obtained medical qualifications, were admitted members of the College:—

Bryden, Frank Wm. Augustine, L.S.A., Trinity-square.
Cox, Wm. A. Spencer, L.S.A., Heald-place, Rusholme, Manchester.
Hayward, G. Cobden, L.S.A., Huddleston-road, Tufnell-park.
Jubb, Frank, L.K.Q.C.P.I., Akeds-road, Halifax, Yorks.
Manners, Wm. Francis, L.S.A., Fentiman-road, South Lambeth.
Potter, Paul de Cresse, L.S.A., Ringley Parsonage, Stoneclough, near Manchester.

UNIVERSITY OF LONDON.—The following candidates have passed the recent M.B. (Honours) Examination:—

MEDICINE.

First Class.

May, W. P., B.Sc., Scholarship and Gold Medal, Univ. Coll.
Fernando, H. M., B.Sc., Gold Medal, University College.
†Dean, H. Percy, B.Sc., University College.
Eq. Ashworth, P., B.Sc., Owens Coll. and Manchester Roy. Infirm.
Eq. Parkin, Alfred, Guy's Hospital.
Eq. Abram, J. H., University Colleges, Liverpool and London.
Eq. Pierce, Bedford, St. Bartholomew's Hospital.
Eq. Wilkie, J., B.Sc., St. Barth.'s and Brompton Consumption Hosp.

Second Class.

Macevoy, H. John, B.Sc., St. Thomas's Hospital.
Roberts, J. Lloyd, B.A., B.Sc., Guy's Hospital.
Clarke, James Jackson, St. Mary's Hospital.
Bradford, J. Rose, D.Sc., University College.
Eq. Kanthack, A. A., B.A., B.Sc., Liverpl. Roy. Infirm. & St. Barth.'s.
Eq. Starling, Ernest Henry, Guy's Hospital.

Third Class.

O'Reilly, G. H., Northampton General Infirmary and King's.
Willoughby, W. G., St. Bartholomew's Hospital.
Eq. Blaxall, Frank Richardson, University College.
Eq. Canney, H. E. Leigh, University College.
Eq. Williams, H., St. Bartholomew's Hospital.
Eq. Mair, L. W. D., St. Bartholomew's Hospital.
Eq. White, G. B. Mower, University College.

OBSTETRIC MEDICINE.

First Class.

Kanthack, A. A., Gold Medal, Liverpool Roy. Infirm. & St. Barth.'s.

Second Class.

Sutherland, G. W., B.A.Syd., Univ. Coll. Lond. and Univ. Edin.
Webb, Helen, Lond. School of Med. and Royal Free Hospital.
Eq. Dean, H. Percy, University College.
Eq. Roberts, J. Lloyd, Guy's Hospital.
Eq. Ashworth, P., Owens Coll. and Manchester Royal Infirmary.
Eq. Firth, John Lacy, University College.

Third Class.

Eq. Ashe, Evelyn O., London Hospital.
Eq. Duncan, H., St. Thomas's Hospital and Cambridge.
Eq. Parkin, Alfred, Guy's Hospital.
Alcock, S. King, St. Bartholomew's Hospital.

FORENSIC MEDICINE.

First Class.

Starling, E. H., Scholarship and Gold Medal, Guy's Hospital.
*Fernando, Hilarion M., Gold Medal, University College.
*Parkin, Alfred, Guy's Hospital.
†Pierce, Bedford, St. Bartholomew's Hospital.
Canney, H. E. Leigh, University College.

Second Class.

Wilkie, J., St. Barthol. and Brompton Consumption Hospitals.
Gould, John Edwin, University College.
Eq. Dean, Henry Percy, University College.
Eq. Kanthack, A. A., Liverp'l Roy. Infirmary and St. Bartholomew's.
Willoughby, W. G., St. Bartholomew's Hospital.
Eq. Ashe, Evelyn Oliver, London Hospital.
Eq. Ashworth, P., Owens Coll. and Manchester Royal Infirmary.
Eq. Melland, Brian, Owens Coll. and Manchester Royal Infirmary.

Third Class.

Sansom, Harry Arthur, St. Thomas's Hospital.
Eq. May, William Page, University College.
Eq. Swayne, W. C., Bristol Med. School and Guy's Hospital.
Eq. Lyndon, Arnold, St. Bartholomew's Hospital.
Eq. O'Reilly, G. H., Northampton General Infirmary and King's.
Eq. Duncan, Horace, St. Thomas's Hospital and Cambridge.
Eq. Sutherland, G. Whitefield, Univ. Coll. Lond. and Univ. Edin.

* Obtained the number of marks qualifying for the University Scholarship.

† Obtained the number of marks qualifying for a gold medal.

The following have passed the M.S. Examination:—

Carless, Albert, King's College.
Dunn, Louis A., Gold Medal, Guy's Hospital.
Gross, Charles, M.D., Guy's Hospital.

The following have passed the B.S. Examination:—

First Division.

Ashworth, Percy, B.Sc., Owens Coll. and Manchester Roy. Infirm.
Brown, Arthur T., Guy's Hospital.
Crook, Herbert Evelyn, Guy's Hospital.
Cuff, Herbert Edmund, Guy's Hospital.
Dean, H. Percy, B.Sc., University College.
Goodall, E. Wilberforce, M.D., Guy's Hospital.
Kanthack, A. A., B.A., B.Sc., Univ. Coll., Liverpool, & St. Barth.'s.
Moss, Enoch, Guy's Hospital.
Parkin, Alfred, Guy's Hospital.
Starling, Ernest Henry, Guy's Hospital.

Second Division.

Bird, Robert, St. Bartholomew's Hospital.
Brock, Ernest Henry, Guy's Hospital.
Edge, F., B.Sc., Owens Coll. and Manchester Royal Infirmary
Leech, Priestley, Owens College.
Smith, Guy Bellingham, Guy's Hospital.
Solly, Reginald Vaughan, St. Thomas's Hospital.
Thompson, James Edwin, Owens College.
Tresidder, William Elliot, Guy's Hospital.
Wheeler, James Atkin, Guy's Hospital.

UNIVERSITY OF CAMBRIDGE.—At a congregation, held on the 6th inst., the following degrees were conferred:—

Doctor of Medicine.—Roland Danvers Brinton, Downing.
Bachelors of Medicine.—Herbert Elwin Harris, Edward Thornton, Christ's.
Bachelor of Surgery.—Edward Thornton, Christ's.

UNIVERSITY OF DURHAM.—At a convocation, held on Dec. 11th, the following candidates were recommended for the degrees indicated:—

Doctor in Medicine for Practitioners of Fifteen Years' standing.

Bennett, William, L.R.C.P., L.R.C.S. Edin.
Hussey, Edward, L.R.C.P., L.R.C.S. Edin.
Utting, James, M.R.C.S., L.S.A.
Webb, Charles Frere, F.R.C.P., F.R.C.S. Edin., M.R.C.S.

Doctor in Medicine.

Giddings, George Thomas, M.B., M.R.C.S.
Montague, Arthur J. Helm, M.B., L.R.C.P. Lond., M.R.C.S., L.S.A.
Packman, Alfred Charles Augustus, M.B., M.R.C.S.
Renney, Henry, M.B., B.S.
Richardson, James Nowell, M.B., M.R.C.S.
Travis, William Owen, M.B., M.R.C.S., L.S.A.
Wilding, James, M.B., L.R.C.P. Lond., M.R.C.S., L.S.A.
Williams-Freeman, John Peere, M.B., M.R.C.S., L.S.A.

Master in Surgery (Old Regulations).

Gibbon, Ernest Henry, M.B., M.R.C.S., L.S.A., College of Medicine, Newcastle-on-Tyne.
Lingard, Alfred, M.R.C.S., L.S.A., St. Thomas's Hospital.

Bachelor in Medicine.

Coates, William Henry, L.R.C.P., L.S.A., London Hospital.
Fawcett, Henry, College of Medicine, Newcastle-on-Tyne.
Gregory, Alfred John, M.R.C.S., L.S.A., London Hospital.
Jones, Arthur Meyrick, M.R.C.S., L.S.A., Guy's Hospital, London.
Keiffenheim, Luigi Walter, Guy's Hospital, London.
Kimpster, Thomas Morland, College of Medicine, Newcastle-on-Tyne.
Lingard, Alfred, M.R.C.S., L.S.A., St. Thomas's Hospital.
Loveley, Charles Newton, London Hospital.
McLoughlin, George Somers, College of Medicine, Newcastle-on-Tyne.
McNabb, Laurence A., College of Medicine, Newcastle-on-Tyne.
Newstead, George, College of Medicine, Newcastle-on-Tyne.
Robinson, George Arbuthnot, London Hospital.
Sandoe, John Worden, M.R.C.S., Guy's Hospital, London.
Webster, Percy Samuel, M.R.C.S., L.R.C.P. Lond., London Hospital.

Bachelor in Surgery.

Baine, Laurence Augustus, College of Medicine, Newcastle-on-Tyne.
Fawcett, Henry, College of Medicine, Newcastle-on-Tyne.
Gregory, Alfred John, M.R.C.S., L.S.A., London Hospital.
Keiffenheim, Luigi Walter, Guy's Hospital, London.
Kimpster, Thomas Morland, College of Medicine, Newcastle-on-Tyne.
McNabb, Laurence A., College of Medicine, Newcastle-on-Tyne.
Newstead, George, College of Medicine, Newcastle-on-Tyne.
Robinson, George Arbuthnot, London Hospital.
Sandoe, John Worden, M.R.C.S., Guy's Hospital, London.
Thompson, Robert, M.R.C.S., L.R.C.P., Guy's Hospital, London.

SOCIETY OF APOTHECARIES OF LONDON.—The following candidates, having passed the qualifying examination in Medicine, Surgery, and Midwifery, have received certificates entitling them to practise in the same, and have been admitted as Licentiates of the Society:—

Basu, Baman Das, Lahore University, Calcutta.
Cox, William Alfred Spencer, Owens College, Manchester.
Coates, William Henry, London Hospital.
De Butts, Arthur John, St. Mary's Hospital.
Dodd, Charles Edward, University College, Liverpool.
Farquharson, George Sinclair, London Hospital.
Gunn, Frank Walter, King's College, London.
Hayward, Gerald Cobden, Middlesex Hospital.
Holt, Henry Mainwaring, Yorkshire College, Leeds.
Manners, William F., Univ. Camb. and St. Thomas's Hospital.
Marshall, Charles Frederic, Owens College, Manchester.
Spratley, Ernest Richd. Woody, University College, Liverpool.

UNIVERSITY OF OXFORD.—On Dec. 7th the diploma in Preventive Medicine was granted to W. B. Williams, M.A., M.B., resident medical officer Royal Hospital, Ventnor, late St. Mary's Hospital.

THE first annual meeting of the Court of Contributors to the Victoria Infirmary of Glasgow was held on the 6th inst., when satisfactory reports were presented and adopted.

THE SUAKIM SIEGE.—The *Shibeen* is to be used as a hospital ship for the treatment of the wounded in the forthcoming engagement. She is capable of accommodating 118 British officers and men.

LITERARY INTELLIGENCE.—Messrs. Longmans and Co. announce the early publication of "The Diseases of Children, Medical and Surgical," by Henry Ashby, M.D., and George A. Wright, B.A., F.R.C.S.

VACCINATION GRANT. — Mr. John Colegrave, public vaccinator, Bloxham district of the Banbury Union, has received the Government grant for efficient vaccination (sixth time).

VICTORIA-PARK HOSPITAL ASSOCIATION.—The annual dinner in connexion with the Victoria-park Hospital Association was held on the 12th inst. in the Mile-end Vestry, under the presidency of Mr. Spencer Charrington, M.P.

THE NEW EYE AND EAR HOSPITAL, HEREFORD.—The ceremony of laying the foundation stone of this building was performed on the 6th inst., by the Countess of Chesterfield. The new structure, to be named the Victoria Eye and Ear Hospital, will cost about £2500. The accommodation will provide for twelve in-patients.

BRIGHTON, HOVE, AND PRESTON DISPENSARY.—A new western branch to this institution was opened on the 3rd inst. by Viscount Hampden. The building occupies an isolated position on the western side of Sackville-road, and is the gift of Mrs. Carr-Burton, an old inhabitant of Brighton, and erected in memory of her deceased husband.

GREAT NORTHERN CENTRAL HOSPITAL, HOLLOWAY.—On Tuesday the Baroness Burdett-Coutts opened a bazaar at Myddelton Hall, Islington, on behalf of the Ladies' Building Fund in connexion with this institution. The object is to raise for the erection of an out-patients' department the sum of £5000, of which £4000 is in hand.

BOSTON HOSPITAL.—The annual meeting of the friends of this charity was held on the 6th inst. The report stated that part of the balance due to the treasurer at the last annual meeting had been made up, and that the work of the institution during the past year had been of a satisfactory character.

GLASGOW WESTERN INFIRMARY.—The fourteenth annual report, submitted at a meeting held on the 29th ult. of qualified contributors to this institution, stated that 16,810 patients had been treated and 35,062 visits paid during the year, compared with 18,589 and 31,111 respectively in the previous year. The balance sheet showed, after payment of expenses, that £956 18*s.* 1*d.* was carried to stock account.

EAST LONDON HOSPITAL FOR CHILDREN AND DISPENSARY FOR WOMEN.—It is announced that the tenth festival dinner, in aid of this charity, will be held at Willis's Rooms, on Thursday, the 20th inst. Mr. Charles A. Prescott, vice-chairman of the board of management, will take the chair. A novel feature of this festival occasion is that the names of ladies appear on the list of stewards, who are also invited to attend the dinner.

CAVENDISH COLLEGE, CAMBRIDGE.—A scholarship of the value of £30 a year for three years will be awarded by the results of the local examinations held in December, 1888. Candidates should communicate with the Master immediately after the publication of the class list in March, 1889. The award will be confined to senior students who are placed in the first class, or, in case of special merit in some important subject, in the second class of honours.

THE SURGICAL AID SOCIETY, LONDON.—The Lord Mayor presided, last week, at the annual meeting of this Society, held at the Cannon-street Hotel. He stated that the benefits which the charity dispensed were yearly increasing. An aggregate total of 73,933 persons had been relieved since its establishment. Such a record of good work must commend itself to the charitable public. The annual report (the twenty-sixth) was adopted, and donations were announced amounting to £370.

LEEDS INFIRMARY.—On the 5th inst. a deputation from the Leeds Infirmary waited upon the Town Council to urge the closing of a road which now divides the property of the institution. A sum of £30,000 has been raised for the alteration of the building, and unless the request be granted the extensions will be divided from the main building. Considerable discussion ensued after the withdrawal of the deputation, and eventually the matter was referred to the Highways Committee for consideration.

PRESENTATIONS.—The students of the Westminster Hospital Medical School have taken advantage of the opportunity offered on the occasion of the marriage of the Dean, Dr. H. B. Donkin, of testifying to the esteem in which he is held by them. The wedding present took the form of a handsome Corinthian pillar telescopic floor lamp, in brass, with a massive base, and chrysanthemum flower shade. Engraved on a shield attached to the capital was the following inscription: "Presented to Dr. Donkin, Dean of the Westminster Hospital Medical School, on the occasion of his marriage, by the students, as a token of warm appreciation and regard." There were upwards of 100 subscribers, including nearly all the students at present attending the hospital.—On Tuesday evening, Dec. 4th, Dr. R. S. Wallace of Longsight was presented with an aneroid barometer by the pupils of the St. John Ambulance Class, conducted by him in the Longsight Free Christian Church Schoolroom during the spring of the present year. Sixteen pupils presented themselves for examination, all of whom passed. Dr. Edge was the examiner.

BEQUESTS AND DONATIONS TO HOSPITALS.—By the will of the late Mr. George Turner, of Devonshire, and formerly of Horton Grange, the Bradford Infirmary has received a legacy of £1000, and the Eye and Ear Hospital £250.—The late Mrs. Margaret Philip, or Walker, Victoria-street, Aberdeen, has bequeathed £10 each to the Incurable Hospital and Dispensary, Aberdeen.—Miss Emily T. Smythe, late of Royal York Crescent, Clifton, has bequeathed £100 each to the Bristol Infirmary, Bristol General Hospital, and the Bristol Blind Asylum.

MEDICAL VOLUNTEER STAFF CORPS, MANCHESTER.—General Daniell inspected, on the 29th ult., the members of the 4th Division, Medical Staff Corps (Manchester). Surgeon W. H. B. Crockwell was in command, and there were also present Surgeons W. Coates, G. H. Darwin, S. McG. Boyd, and Quartermaster B. R. Howell. Fifty members of the corps were present on parade. The General paid great attention to the manner in which the men carried out experiments in the work more particularly pertaining to their department, and afterwards congratulated both officers and men on the efficiency of the corps.

BURIAL REFORM.—The Duke of Westminster introduced on Tuesday a deputation to the Home Secretary, Mr. Matthews, from the Church of England Burial Reform Association, to present a memorial, soliciting the appointment of a Royal Commission to inquire into the condition of cemeteries and other burial places, and the modes of burial adopted, with the object of further legislation. Several of the deputation followed the Duke of Westminster in addressing the Home Secretary, who replied that the subject would receive the careful consideration of the Government and himself, but added that further legislation on the question would require the strictest caution.

ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH.—At the annual meeting of the Royal College of Physicians of Edinburgh, held on Thursday, Dec. 6th, the following office-bearers were elected for the ensuing year:—President: Dr. Robert Peel Ritchie. Vice-President: Sir Douglas Maclagan. Council: Sir Douglas Maclagan, Drs. George William Balfour, Thomas Grainger Stewart, Claud Muirhead, D. J. Brakenridge, and John Batty Tuke. Examiners: Sir D. Maclagan, Sir Arthur Mitchell, Drs. Douglas, Keiller, Geo. W. Balfour, R. Peel Ritchie, Muirhead, Brakenridge, Wyllie, Andrew, Batty Tuke, Sinclair, Carmichael, Affleck, James, Gibson, Croom, Hart, Russell, Gray, Milne Murray, Noel Paton, Henry D. Littlejohn, Charles Hunter Stewart, and Mr. Wm. Lees, M.A. Treasurer: Dr. Peter A. Young. Secretary: Dr. George Alex. Gibson. Librarian: Dr. George W. Balfour. Curator of Museum: Dr. Thomas A. G. Balfour. Curator of Laboratory of Research: Dr. John Batty Tuke. Registrar of Applicants for Licence: Dr. George A. Gibson. Superintendent of Laboratory: Dr. German Sims Woodhead. Clerk: Mr. Christopher Douglas, W.S. Representatives of the College on the Committee of Triple Qualification: Dr. Peddie and Dr. George W. Balfour.

MEMORANDUM FOR THE INFORMATION OF MEDICAL PRACTITIONERS IN REGARD TO THE EMPLOYMENT OF UNQUALIFIED ASSISTANTS.

A.—On April 21st, 1883, the General Medical Council passed the following resolution: "That the Council record on its Minutes, for the information of those whom it may concern, that charges of gross misconduct in the employment of unqualified assistants, and charges of dishonest collusion with unqualified practitioners in respect of the signing of medical certificates required for the purposes of any law or lawful contract, are, if brought before the Council, regarded by the Council as charges of infamous conduct under the Medical Act."

B.—On November 20th, 1886, the attention of the Council having been directed to this resolution, it was determined that steps be taken with a

view of making it public; accordingly, on July 25th, 1887, the Executive Committee resolved that it should be inserted twice, at an interval of a month apart, as an advertisement, in the following medical journals: THE LANCET, *British Medical Journal*, *Medical Press and Circular*, *Provincial Medical Journal*, *Edinburgh Medical Journal*, *Glasgow Medical Journal*, *Dublin Medical Journal*.

C.—On November 22nd, 1887, a report was adopted by the General Council stating that, as a consequence of the publication of the foregoing advertisements, a number of letters, chiefly marked "Private," on the subject of the employment of unqualified assistants, had been received by the Registrar. This report proceeds as follows: "From these communications, from notices in the newspapers, and also from common report, it is evident that magistrates, coroners, county-court judges, and other representatives of the public sense of justice, as well as medical men themselves, are becoming alive to the professional misconduct of registered practitioners who place patients under the sole charge of unqualified assistants. The administrators of the law regard as implicit fraud any claim of payment for the service of such substitute assistants when it is represented as 'medical attendance.' This fact is encouraging, for when it is found that the owner of a 'branch practice' cannot get a claim allowed for the services of his unregistered 'substitute,' and, moreover, that the protection of a 'cover' does not enable the unregistered practitioner to recover charges, these two kinds of irregular practice will probably not long continue to exist in this country."

D.—On Nov. 24th, 1887, a case of the misemployment of an unqualified assistant was brought before the notice of the General Council and adjudicated upon; and the registered practitioner concerned, having been informed of the grave disapprobation with which the Council regarded his conduct, promised at once to discontinue the practice condemned.

E.—In the prosecution of their desire to put a stop to this wrongful practice, the following resolution was passed by the General Council on November 26th, 1887: "That it be referred to the Executive Committee to consider under what circumstances a registered medical practitioner would render himself liable to the censure of the Council in reference to the employment of unqualified assistants."

F.—On February 27th, 1888, the Executive Committee, without attempting to make a formal definition of the misconduct in question, reported to the General Council that, in its opinion, "a registered medical practitioner would render himself liable to the censure of the Medical Council in case of the employment of an unqualified assistant in the practice of medicine, surgery, or midwifery on behalf and for the benefit of such registered practitioner, either in complete substitution for his own services or under circumstances in which due personal supervision and control are not, or cannot be, exercised by the said registered practitioner." The Executive Committee also stated in reference to the procedure known as "covering" that in its view a registered practitioner covers an unregistered person when he does, or assists in doing, or is party to, any act which enables such unqualified person to practise as if he were duly qualified. The Executive Committee furthermore called attention to a resolution passed by the General Council on April 21st, 1883 (vol. xx., p. 91), which implies that, in the Council's opinion, "any registered practitioner practising for gain who knowingly and wilfully deputes a person not registered or qualified to be registered under the Medical Act to professionally treat on his behalf, in any matter requiring professional discretion or skill, any sick or injured person, 'should' be subject to the same legal liabilities as a person who falsely represents himself to be a legally qualified medical practitioner, but with special proviso that such enactment 'should' not hinder any duly regulated training of pupils in medical schools or otherwise by legally qualified practitioners, nor the use of trained pupils in partially treating the sick or injured, under the direction, supervision, and responsibility of such practitioners, nor any legitimate employment of nurses, midwives, or dispensers."

G.—On May 24th, 1888, the Council found and declared that the offence of "covering" had been proved against a practitioner brought before it; but on the defendant's admission that he had inadvertently committed that offence, his statement that he had discontinued the practice, and his promising not so to offend again, the Council passed thereon this further resolution: "That A. B. having expressed his contrition at having followed a course of conduct which the Council had declared to be most gravely wrong, and having stated that he had altogether ceased to pursue, and would pledge himself not to resume, such conduct, and having then prayed for a merciful consideration of his case by the Council, the Council, in view of all the circumstances of the case, does not see fit to proceed further in the matter beyond requesting the President to admonish him most seriously." The President communicated to A. B. the foregoing resolution, and also admonished him seriously as to the exceeding gravity of his conduct.

H.—Other cases have also been brought, from time to time, under the notice of the Executive Committee.

June 12th, 1888. JOHN MARSHALL, President.

MEDICAL NOTES IN PARLIAMENT.

Public Health Acts Amendment (Buildings in Streets) Bill.

IN the House of Lords on the 11th inst., on the motion for the third reading of this Bill, the Earl of Wemyss asked that the stage might be postponed for a week for the further consideration of what was understood to be an interference with the rights of owners to claim compensation from the local authority if they were restricted from advancing buildings to what was considered their frontage line.—Lord Basing said that, although the objection was taken rather late in the day, no practical difficulty would arise from postponement, and the order was accordingly put back.

Infectious Diseases in Towns.

In the House of Commons, on the 7th inst., in answer to Sir W. Foster, Mr. Ritchie said that the Local Government Board had receive communications from several towns in which the system of compulsory notification of disease has been adopted, suggesting that the Board should undertake the collection and issue of weekly returns as to cases of infectious sickness in the town in which that system is in force; and he had the subject now under his consideration. The number of sanitary authorities which would undertake to furnish the returns would probably be about thirty. In answer to a further question by Sir W. Foster, Mr. Ritchie said that the Act was not yet compulsory, and it was not advisable at present to publish accounts as to the condition of infectious diseases in towns. He hoped that the Government would be able to legislate on this subject next session, and then all reasons for not publishing the returns would have ceased.

Lady Doctors in India.

In answer to Mr. W. M'Laren, Sir J. Gorst said that the Secretary of State had considered the report of the Surgeon-General of Bombay on civil hospitals, which was of a most satisfactory character as regards the services of the lady doctors. It was decided in 1886 that the appointments in the Cama Hospital should be temporary only, and should be revised at the end of five years in the light of the experience gained and the progress of medical education in India. The Secretary of State did not propose to shorten the period of probation which was then decided on.

Mortality in North Staffordshire Mines

In reply to Captain Heathcote, Mr. Matthews stated that he was aware that in 1880 the death-rate per 1000 men employed in coal and ironstone mines in North Staffordshire was 6·61, the death-rate for Great Britain and Ireland being only 2·72, and that in 1887 the death-rate for North Staffordshire was reduced to 1·35, as against 1·89 for Great Britain and Ireland; also that in 1880 only 55,546 tons were raised in North Staffordshire per life lost, as against 122,509 tons raised in Great Britain and Ireland; while in 1887 263,733 tons were raised per life lost in North Staffordshire, as against 173,919 tons in Great Britain and Ireland. He, however, saw no reason to alter the arrangements he had already made respecting the vacant inspectorship of mines in that district.

The Scotch Universities Bill.

In answer to Mr. Marjoribanks, Mr. W. H. Smith thought he could not add to the suggestion he had formerly made that the Scotch Universities Bill should be discussed *pari passu* with the Appropriation Bill. In answer to Mr. Hunter, Mr. Smith stated that he had received a memorial signed by twenty-two Scotch members asking him to proceed with the Bill, and a memorial signed by twenty one Scotch members asking him not to proceed with it.

The Sanitary Condition of Cradley Heath

On the 10th inst., in reply to Mr. Conybeare, Mr. Ritchie said that there had been several inspections of the Cradley district by Inspectors of the Local Government Board. In the absence of formal complaint the Board could only urge the sanitary authority to discharge the duties which have been entrusted to them.

On the 11th inst., in answer to Mr. Conybeare, Mr. Ritchie said that the reports of the officers of the Local Government Board are not a sufficient authority for the Board's taking action under Section 299 of the Public Health Act If a formal complaint were made to the Board by resident ratepayers, in the terms of that section, that the sanitary authority had made default in providing the district referred to with sufficient sewers, it would receive the attention of the Board.

Haslar Hospital.

On the 11th inst., in reply to Commander Bethell, Lord G. Hamilton stated that there are at present 392 surgical cases under treatment at Haslar Hospital, of which 239 are venereal. The proportion of venereal diseases to other surgical cases has increased since the suspension of the Contagious Diseases Acts, as the following percentages show. For the four years prior to the suspension of the Acts: 1879, 44·09; 1880, 41·31; 1881, 41·34; 1882, 42·2. For the four years subsequent to the suspension of the Acts: 1884, 60·96; 1885, 55·17; 1886, 53·58; 1887, 56·56

Mortality from Cancer.

On the 11th inst., in answer to Mr. Ambrose, Mr. Ritchie said that the staff of the medical department of the Local Government Board did not exceed that which was required for the duties which specially attach to the Board in connexion with their executive action. He did not doubt that an inquiry into the causes of the alleged increase of mortality from cancer in England and Wales would be valuable, but the demands on the department in connexion with other duties would not permit of its undertaking such an inquiry.

Sanitary Condition of Dublin Barracks

In reply to Sir W. Barttelot, Mr. E. Stanhope said that, as he had previously explained, nearly all the recommendations of the commission under Sir C. Cameron, relative to the Royal Barracks, Dublin, had been carried out, and several further works were almost completed.

Cruelty to Children (Prevention) Bill.

On the 12th inst. the Attorney-General, replying to Mr. Mundella, said that he sympathised with the object of this Bill, which, however, contained such debateable matter, and required so much amendment, that it would not be fair to the House to ask it to proceed with it this session.—Mr. Mundella postponed the motion for the second reading of the measure till the 17th inst.

Vaccination.

During the discussion of the Scotch estimates, on the vote of £3347 for the Board of Supervision, Scotland, Dr. Hunter, in consequence of an unsatisfactory answer he had received respecting the cumulative penalties under the Vaccination Acts, moved its reduction by £1000. He quoted, with approbation, Dr. Creighton's article in the "Encyclopædia Britannica."—Dr. Farquharson regretted the appearance of this article, and did not believe that it would receive the assent of the Scottish community. The vote was ultimately agreed to.

Lunacy

On the vote to complete £5000 for the Lunacy Commission (Scotland) Dr. Farquharson said the English lunacy system might be improved by borrowing from Scotland small lunacy districts, with resident commissioners making frequent visits to lunatics, and by increasing the number of commissioners in proportion to the number of lunatics; and the Scotch system might borrow from that of England the restriction that commissioners should not engage in private medical practice. The vote was then agreed to.

BOOKS ETC. RECEIVED.

CLOWES, W., & SONS, 13, Charing-cross, London.
Guide to Stretcher and Bearer Company Drill. By Staff Sergeant W. K. Waterson. Illustrated with Plates. 1889. pp. 132.

KEGAN PAUL, TRENCH, & CO., Paternoster-square, London, E.C.
Mental Evolution in Man: Origin of Human Faculty. By Geo. J. Romanes, M.A., LL.D., F.R.S. 1888. pp. 452. Price 14s.

LECROSNIER ET BABÉ, 23, Place de l'École de Médecine, Paris.
Travaux d'Obstétrique du Dr. A. Auvard. Tome I., 115 figures. Tome II., 137 figures. Tome III., 56 figures. Travaux inédits. 1889.

SAMPSON LOW, MARSTON, & CO., St. Dunstan's House, Fetter-lane, E.C., and EDWARD STANFORD, Cockspur-street, London, S.W.
Orient Line Guide. Chapters for Travellers by Sea and by Land. Illustrated. Third Edition, rewritten, with Maps and Plans. By W. J. Loftie, B.A., F.S.A. 1888. pp. 439. Price 2s. 6d.

SPOTTISWOODE & CO., New-street-square, London.
Inspectors' Reports and General Commentaries on the Final Examinations in Medicine, Surgery, and Midwifery, conducted by the several Medical Licensing Bodies in the United Kingdom. 1888. pp. 206.

SPON, E. & F. N., 125, Strand, London.
Transmission of Power by Fluid Pressure—Air and Water. By Wm. Donaldson, M.A. 1888. pp, 78.

TRUAX, CHAS., Wabash Ave., Chicago.
Intubation of the Larynx. By F. E. Waxham, M.D. 1888. pp. 110.

TRÜBNER & CO., Ludgate-hill, London, E.C.
Papers on the Pure Oral Instruction of the Deaf and Dumb. By Wm. Van Praagh. Price 2s.

On Certain Disregarded Defects of Development, chiefly in Relation to the Curves of the Spine; by T. W. Nunn (John Bumpus, 350, Oxford-street, London, 1888). Price 1s.—Die Traumatischen Neurosen, nach den in der Nervenklinik der Charité; von Dr. Med. Herm. Oppenheim (August Hirschwald, Berlin, 1889). Report on Animal Vaccination; by H. A. Du Bois, Ph.B., M.D., California.—The Contagiousness of Phthisis (Tubercular Pulmonitis); by Lawrence F. Flick, M.D. Philadelphia (Wm. J. Dornan, Philadelphia, 1888).—Minutes of the General Medical Council and of the Executive Committee, from Nov. 26th to Dec. 3rd, 1888 (Spottiswoode & Co., 54, Gracechurch-street, London).—Magazines for December: Good Words, Sunday Magazine (with Christmas number), Leisure Hour, Sunday at Home, Boy's Own Paper, Girl's Own Paper (with Christmas number), Scribner's.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

ALTHORP, C. F. M., L.R.C.P. Lond., M.R.C.S., has been appointed House Physician, Bradford Infirmary, vice Vaughan, resigned.

BEARD, F., M.B., M.R.C.S., has been appointed Medical Officer of the Fifth District, Croydon Union District.

BODMER, RICHARD, has been appointed Analyst of the Parish of Bermondsey.

BRAG, H. A., M.R.C.S., L.R.C.P. Lond., has been appointed House Surgeon to King's College Hospital.

BRYETT, L. T. F., M.R.C.S., L.R.C.P. Lond., L.S.A. Lond., has been appointed Assistant House Physician to King's College Hospital.

CALLCOTT, J. T., M.D., has been appointed Medical Superintendent of the Newcastle Borough Asylum, vice R. H. B. Wickham, M.D., resigned.

CHEATLE, A. H., M.R.C.S., L.R.C.P. Lond., has been appointed Assistant House Accoucheur to King's College Hospital.

CHEATLE, G. L., M.R.C.S., L.S.A. Lond., has been appointed House Physician to King's College Hospital.

DOUDNEY, G. H., M.B., M.R.C.S., has been appointed Medical Officer to the Wainfleet District of the Spilsby Union, vice E. Reckitt, M.D., resigned.

FOWLER, THOS. WEBB, L.R.C.P. Lond., M.R.C.S., L.S.A. Lond., has been appointed Medical Officer of No. 2 District of the Coventry Union.

GRAYLING, ARTHUR, M.B. Lond., L.R.C.P. Lond., M.R.C.S., has been appointed Assistant Medical Officer to the Home and Infirmary for Sick Children, Sydenham, S.E.

HUGHES, S. HENRY, M.R.C.S., L.R.C.P. Lond., L.S.A. Lond., has been appointed House Surgeon to the Royal Westminster Ophthalmic Hospital, vice F. O'Kinealy, M.R.C.S., L.R.C.P. Lond., resigned.

JOHNSTON, FRANCIS, M.B. Glas., has been appointed Honorary Surgeon to the Wirral Hospital for Sick Children, Birkenhead, vice Dr. Geo. Barfoot, deceased.

LANGTON, C. B. T., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer of the Long Sutton District, Holbeach Union.

LIESCHING, C. G., M.R.C.S., L.R.C.P., has been appointed Medical Officer and Public Vaccinator for the Sampford Peverell &c. Districts of the Tiverton Union, vice Dr. Bryden, resigned.

LLOYD, JORDAN, M.B. and M.S. Dur., F.R.C.S. Eng., has been appointed Acting Surgeon of the Birmingham Children's Hospital, vice Elkington.

PENNY, J., M.R.C.S., L.R.C.P. Lond., has been appointed House Accoucheur to King's College Hospital.

PITT, C. W., M.R.C.S., L.S.A. Lond., has been reappointed Medical Officer of Health, Malmesbury Union District.

READ, HENRY G., M.R.C.S., L.R.C.P. Lond., L.S.A. Lond., L.D.S. Eng., has been appointed Dental Surgeon to the National Dental Hospital, vice Thomas Gaddes, resigned.

READ, T. G., D.M.D. Harv. Univ. U.S.A., L.D.S. Eng., has been appointed Assistant Dental Surgeon to the National Dental Hospital and College.

THOMSON, W. SINCLAIR, M.D., M.C., F.R.C.S. Edin., late Consulting Surgeon to the General Hospital, Peterborough, has been appointed Honorary Surgeon to the Kensington Dispensary.

WARD, H. P., M.R.C.S., L.S.A. Lond., has been appointed House Surgeon to King's College Hospital.

WARD, J. A., M.R.C.S., L.S.A. Lond., has been appointed Assistant Medical Officer of the Renfrew-road Workhouse, and the Infirmary, parish of St. Mary, Lambeth.

WEISS, FELIX HENRI, has been appointed Dean of the National Dental Hospital, vice Thomas Gaddes, resigned.

WHITE, E. R., M.R.C.S., L.R.C.P. Lond., has been appointed House Surgeon to King's College Hospital.

WILSON, JOHN, L.R.C.P., L.R.C.S. Edin., has been reappointed Medical Officer of Health, Pudsey.

WRIGHT, C. F., M.R.C.S., L.S.A. Lond., has been appointed Medical Officer of the Rishangles District, Hartismere Union.

Vacancies.

In compliance with the desire of numerous subscribers, it has been decided to resume the publication under this head of brief particulars of the various Vacancies which are announced in our advertising columns. For further information regarding each vacancy reference should be made to the advertisement.

BIRMINGHAM MEDICAL AID ASSOCIATION.—Several additional Medical Officers in the Borough and suburbs.

CHORLTON-UPON-MEDLOCK.—Honorary Medical Officer.

EVELINA HOSPITAL FOR SICK CHILDREN, Southwark-bridge-road, S.E.—Physician to Out-patients.

GENERAL HOSPITAL, Birmingham.—Assistant House Surgeon. No salary, but residence, board, and washing will be provided.

LEICESTER UNITED FRIENDLY SOCIETIES MEDICAL ASSOCIATION, High-cross-street, Leicester.—Non-resident Medical Officer. Salary £100 per annum, with unfurnished house, cab, and other fees.

OWENS COLLEGE, MANCHESTER.—Junior Demonstrator in Zoology. Salary £100 per annum.

STOCKPORT INFIRMARY.—Assistant Medical Officer, to visit patients at their homes and assist the House Surgeon. Salary £70, with board and lodging.

TOWNSHIP OF TOXTETH-PARK, Liverpool.—Assistant Medical Officer of the Workhouse and Infirmary. Salary £100 per annum, with rations of a first-class officer and separate apartments.

Births, Marriages, and Deaths.

BIRTHS.

RICE-OXLEY.—On the 8th inst., at Conis'ro', Leigham-court-road, Streatham, the wife of A. J. Rice-Oxley, M.A., M.B., of a son.

SCOTT.—On the 9th inst., at Meadow Croft, St. Margaret's, Twickenham, the wife of Charles C. Scott, M.B. Edin., of a son.

WILLIAMS.—On the 9th inst., at James-street, Buckingham-gate, S.W., the wife of E. Lloyd Williams, M.R.C.S., L.R.C.P., L.D.S., of a son.

MARRIAGE.

DONKIN—PALMER.—On the 8th inst., at St. George's, Hanover-square, Dr. Donkin, of Harley-street, eldest son of Bryan Donkin, Esq., of Blackheath, to Auguste Margarethe, widow of the late Professor E. H. Palmer, of Cambridge, and youngest daughter of the late Carolus, Count di Langhi, of Cracow.

DEATHS.

BOYLE.—On the 6th inst., at Newquay, Cornwall, Thomas Boyle, M.R.C.S., L.S.A. Lond., aged 54.

CLIBBORN.—On the 5th inst., at the Royal Naval Hospital, Lisbon, J. B. Clibborn, L.R.C.S.I., Surgeon R.N., aged 36.

HOOPER.—On the 10th inst., at 9, Trinity-square, Borough, Sarah, wife of Dr. Daniel Hooper.

MALLAM.—On the 5th inst., at Rose Bank, Blackall-road, Exeter, Benjamin Mallam, M.R.C.S., aged 63.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, December 13th, 1888.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Maximum Temp. Shade.	Min. Temp	Rainfall.	Remarks at 8.30 A.M.
Dec. 7	30·05	S.E.	46	45	78	55	44	..	Hazy
,, 8	30·10	S.E.	46	45	..	51	41	..	Foggy
,, 9	30·14	S.W.	39	38	..	47	37	·14	Cloudy
,, 10	30·35	S.W.	32	32	..	41	31	..	Hazy
,, 11	30·32	S.	33	32	..	43	31	..	Hazy
,, 12	30·33	S.E.	36	33	53	41	32	..	Hazy
,, 13	30·36	S.E.	34	33	53	38	32	..	Hazy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editors."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed to the Sub-Editor.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "to the Publisher."*

We cannot undertake to return MSS. not used.

HARD ON THE ENGLISH ARISTOCRACY.

THE author of the following remarkable advertisement seems to have as high an opinion of himself as he has a low one of English intelligence—at least, among the aristocracy. We trust that the aristocracy will undeceive him.

Homœopathy.—A young, talented homœopathic physician, having brilliant testimonials about successful cures at his disposal, offers his services to the English aristocracy for the tendance respectively for the complete restoration of the health of the members of their families, either at home or while travelling, and would at the same time also undertake the education of the children.—Please address to ——, care of ——, Advertising Agents, ——, Germany.

J. S.—The case is very exceptional, and should be treated so. Medical men are not called on to countenance an unqualified practitioner, even of such standing, though in extreme cases and under such circumstances we are not prepared to say that they should decline all consultation.

ARTHUR.—The questions are purely legal ones. Our correspondent should consult a solicitor.

Mr. Cutbush.—We are unable to assist our correspondent.

MR. HUTH'S BOOK ON "MARRIAGE OF NEAR KIN."

To the Editors of THE LANCET.

SIRS,—May I call attention to what appears to me to be rather a flagrant case of literary piracy?

Under the title of "Huwlijkentusschen Bloedverwanten," a Mr. N. P. van der Stok has published a work which is merely a translation of the first edition of my "Marriage of Near Kin" (1875). It is true that he has added some padding of his own, and a few additional facts, mostly of very little importance; but he is ignorant of the appearance of my second edition last year, which, owing to the advance of knowledge during the interval, I had almost entirely to rewrite. Mr. Stok no doubt felt that some explanation was requisite, and therefore, adding insult to injury, he alludes to my book as follows (I translate from the Dutch of p. 9):—"I made acquaintance with the book when I had already collected a great deal of my material, and consequently a good many of the facts I introduce will also be found in Huth; while, on the other hand, a great number of investigations, observations, communications, or opinions, were unknown to the English writer. I need only refer to the list appended to that work of books quoted from which are in Dutch ....which, of course, the Englishman was unable to read, to point out how incomplete that work of Huth's is." It is interesting to note that the Dutch references of Mr. Stok himself are all general works, (i.e., a Dutch Koran) together with references to two or three periodicals; among which only a few of the latter appear to be of any importance.

I am, Sirs, yours truly,

London, Dec. 6th, 1888. ALFRED H. HUTH.

SPECIAL CERTIFICATES.

Viator writes asking, if the Medico-Psychological Association is allowed to issue certificates of proficiency in the knowledge of mental diseases, why should there not be instituted similar certificates for the treatment of diseases of the eye, ear, &c.? In answer to this it may be said that questions upon such diseases are invariably set in the examination papers of the licensing bodies, whereas up till quite recently there was no examination whatever in psychological medicine.

Enquirer.—1. A Poor-law medical officer is not bound to certify to a pauper's lunacy. The Poor-law medical officer, as part of his duty to the guardians, has to give notice to the relieving officer that a person is deemed to be a lunatic, and a justice of the peace, on the sworn information laid before him, directs who shall visit and report on the case, and states what fee he will allow. Furthermore, the Poor-law medical officer is not bound to obey the order of the justice of the peace to visit and examine and report, his contract being with the guardians.—2. We consider that as the medical relief book is required by the clerk for his examination, it ought to be sent for by the workhouse authorities, and returned in the same way, free of cost to the medical officer.

An Enquirer.—There is no need to dispense the drug alluded to in the form of a solution. It can with propriety be sent out in the crystalline state with directions to dissolve it in warm water, and to let it be taken at once. Most of the text-books indicate the range of solubility with varying temperatures. To attempt to exceed this range is certain to be attended with failure.

Mr R. H. S. Carpenter's communication shall receive attention.

A Constant Subscriber.—There is no authority for doing so.

"HUMAN BLOOD AND THE MICROSCOPE."

To the Editors of THE LANCET.

SIRS,—My attention has been called to a paragraph in your issue of Saturday, Dec. 8th, 1888, headed "Northern Counties Notes," where, under a sub-heading, "Human Blood and the Microscope," you refer to evidence given at the last Durham Assizes, on the trial of William Waddle for the Birtley Fell murder, and where you make it appear that there was some conflict between the statements of the surgeons and myself (the analyst). Such was certainly not the case, for the surgeons themselves did not agree. They both frankly confessed that they had not investigated the subject themselves, that they had read generally; and whilst Dr. Galloway said, with apparent doubt, that he believed the blood corpuscles of the human subject and certain other mammals had not been differentiated, Dr. Taylor averred that the problem was a soluble problem so far as his reading carried him, and he quoted authors from memory. So far "the experienced and intelligent surgeons" who disagreed (according to you) with the analyst. Now for the analyst. I said, as I say now, that by careful microscopic, micrometric, and photographic observation, using high powers, the question is capable of settlement. I do not speak of what I have *read*; I speak of what I have *done*. This is hardly a question for even the most "experienced and intelligent" of surgeons, unless he is content to give up his days and nights to uninterrupted microscopic observation, to devote himself to photo-micrography, and to learn the art of micrometry. When he has done this he will be in a position to speak with authority on the question of blood corpuscles, and not till then. With such it would be profitable to discuss this question, else it were simply a waste of time.—I am, Sirs, yours truly,

W. F. K. STOCK, F.C.S., F.I.C.,
Public Analyst for the County of Durham and the Borough of Darlington, Dec. 11th, 1888. West Hartlepool.

*** The remarks in question were those of our Newcastle correspondent, and were in nowise editorial. We have, however, no desire to join issue with the writer of the above letter as to whether analytical chemists or medical men are the better qualified to pronounce upon the question of the differentiation of human from other mammalian blood corpuscles by means of microscopic, micrometric, and micro-photographic observations. It is sufficient for our purpose to say that at least one of the surgeons in question enunciated the view held by those who have made probably as long and exhaustive experiments as our correspondent. We are aware that, with the use of high powers of the microscope, say up to 750 diameters, and by other means, Richardson of Philadelphia, U.S.A., has claimed to be able to tell human blood corpuscles from those of other mammalian corpuscles most resembling them, and that he has claimed to be able to give evidence thereon "on certain trials for murder," and, further, that he is corroborated to some extent by Seiler. This, however, has reference only to fresh blood, and not to dried or partially dried stains. We believe, nevertheless, that we are in perfect agreement with nearly all English and foreign skilled microscopists when we say that it would be unsafe to testify before a jury at a criminal trial that even a sample of fresh blood was undoubtedly human, and if one cannot speak with absolute certainty, or at least with the highest degree of probability, such evidence would be dangerous, and might be fatally misleading.—ED. L

"THE METROPOLITAN HOSPITAL."

To the Editors of THE LANCET.

SIRS,—As one of the medical officers connected with the Provident Department of the Metropolitan Hospital, I shall be pleased if you will allow me an opportunity of replying to the reproaches levelled at my colleagues and myself by Mr. Locke in your last issue.

Mr. Locke's letter, it seems to me, contains more of statement than of proof, and I am certain that it does great injustice both to the purpose and efforts of the hospital authorities and to the feeling of general practitioners with regard to them. Mr. Locke tells us that the undertaking has been wholly unfair to the general practitioner in inception and development, that it is not limited to persons of certain income, but includes those who can afford to pay a reasonable fee to visiting medical men, and that it tends to cause depreciation of the value of medical attendance. Sirs, these are extreme and misleading statements, and it is very remarkable that Mr. Locke should offer in support of them no evidence whatever. The Provident Department is organised on lines fundamentally similar to those of the numerous medical clubs which exist for the benefit of the working classes. It differs from these, however, in one important particular—namely, that whereas, contrary to Mr. Locke's assertion, members are carefully selected with reference to a low maximum wage limit (25*s.* for a single man, 40*s.* for a family), no such general rule is observed in the case of the provident clubs. On this point I can speak with personal experience of club practice. It is not by any means a rare thing to find persons in prosperous circumstances and well able to afford payment for even a somewhat lengthy medical attendance, receiving what is practically charitable relief through the uncomplaining forbearance of their club doctor. Any such abuse is, and must be, rare, where a limit of income is fixed and insisted on, as in the case of the Metropolitan Hospital.

Mr. Locke says that patients are seen at the hospital who can pay a reasonable medical fee. This may well be, for there is no charitable institution of which it cannot be said that persons so situated are admitted to benefit, yet the charity may be none the less genuine. The poorest person can on occasion pay a small fee, but it does not follow that he can stand the cost of continued medical treatment even for a short time. I would ask you, Sirs, whether the present system, with its uncertain payments and its enforced almsgiving on the part of practitioners, is in any way superior to that provident arrangement which, while it must always remain a charity, aims at maintaining a spirit of self-help among the thrifty poor. There can be, I think, but one answer to this question. The new principle is a good one provided that it is carefully worked out, and I grant that everything turns on this practical point. Hitherto the Metropolitan Hospital, in its provident department, has loyally endeavoured to select its patients from among the labouring poor who cannot afford any continued medical attendance, and its success in the work of selection has been at least equal to that of any medical benefit club, and probably far superior to that of most.

It would be folly to suppose that under any system whatever abuses were quite impossible; but this much I can say, that the hospital committee are sincerely anxious to avoid encroaching on the practices of neighbouring medical men, and are carefully applying their system of out-patient relief with that object. Any injury which has been already inflicted must have been comparatively trifling, and less than might have been expected had a free Hospital been established in the same district. Competition is inevitable. The mere establishment of any medical charity implies this; but all will allow that it is justifiable if its methods are not unfair. The method adopted by the hospital provident department is not.

I do not think it is necessary to discuss the assertion that the analogy between the hospital and the medical clubs falls through because the members of the latter are, as a rule, picked men. The rule applies to some clubs, but not to all. Moreover, the club is a medium of life insurance, and an entrance test is obviously more natural in its case than in that of a purely curative institution. I hope, Sirs, I have shown that the provident department is not that iniquity which our accusers would have you believe. It is an honest endeavour to meet at once the wants of the poor, the needs of the London hospitals, and the just rights of local practitioners. If any provident method is preferable to its present one, let our critics say what it is, and I am sure, though I have no authority for the statement, that their suggestions will receive from the hospital committee full and friendly consideration.

I am, Sirs, yours faithfully,
December, 1888. B. G. MORISON.

Mr. Jno. Grant.—Only a few of these papers have been published. Possibly a complete set might be obtained by application to the heads of the three departments.

A Subscriber for Fifteen Years.—Chevalier published a work on Diseases at St. Domingo in 1752. We know of no later work. For the rest we must refer our correspondent to our Students' Number, issued in September last.

Medicus will find a reply to his question in the answer given to another correspondent.

"THE CAUSE OF CRAMP."

To the Editors of THE LANCET.

SIRS,—Allow me to correct a slight inadvertence in Mr. Hine's reference to my remarks on the cause of cramp. I never stated that the affection was due to "organisms" but to toxic alkaloids.

I am, Sirs, yours truly,
Glasgow Dec. 8th, 1888. A. G. AULD.

BONE-SETTERS.

To the Editors of THE LANCET.

SIRS,—Apropos of an annotation on the above in your issue of Nov. 17th, I think the following may be interesting, as showing one of the class of cases in which the bone-setter takes fees for doing mischief.

A woman of about thirty-five years of age came to the dispensary suffering from subacute rheumatism, the wrists being particularly swollen and painful. Keeping her in bed and giving the usual treatment gave some considerable benefit by the third day. On the fourth, however, I found on visiting her that the left wrist was bound tightly up in a calico bandage, the back of the hand was much swollen from œdema, and the fingers were like sausages. I found that in the afternoon of the previous day a local bone-setter had seen the wrist, and proclaimed it to be "out," and that the only remedy would be to have it properly reduced. So, with her consent, he gave it about five minutes' hard twisting in all directions, making her nearly faint with pain. With great assurance he then pronounced it to be "in," put on the bandage, and took half-a-crown fee. She was in great agony for some days afterwards, and could get no sleep or ease. This happened a month ago. The patient has for nearly a fortnight been able to get about; but the arm is still kept in a sling, and she cannot move the wrist. Passive movement, which is very limited, shows some grating in the joint, and, I fear, permanent stiffness will ensue.

I am glad to find that bone-setting is a "waning trade," and the sooner such charlatans fade out of existence altogether the better for the public at large. I am, Sirs, your obedient servant,
Morpeth Dispensary, Nov. 28th, 1888. G. G. GIDLEY.

A Surgeon.—The subject is threadbare. The degree of M.B. does not carry the title of "Dr." save by courtesy. Our correspondent draws a comparison between the education of a London student and the examinations he has passed—not that of the London colleges, but that of the Edinburgh joint corporations,—and maintains his claim to be equal to those of the graduates of the Scottish universities. He will not find the claim admitted by either Scotch graduates or Scotch professors.

J. S. B. and G. T. S.—To Parkes and Wilson should at least be added the Reports of the Medical Officer of the Local Government Board and recent special Reports, Orders, Memoranda, and Model Bye-laws

H. A.—As our correspondent had notice—imperfect, we admit—in point of time of the wish of the patient to withdraw from the contract, we would not advise him to press the matter. His success would be doubtful.

ANOTHER "ROUGH-AND-READY MEDICAMENT."

To the Editors of THE LANCET.

SIRS,—With reference to this heading, and having exhausted all I had myself to say anent it, I enclose a letter just received from Morocco, which illustrates another phase of this practice, if it does not show that "one touch of nature makes the whole world kin."

I am, Sirs, your obedient servant,
Auriol-road, W., Dec. 6th, 1888. W. CURRAN.

"Tangier, Morocco, N. Africa, Dec. 1st, 1888.

"DEAR SIR,—I was interested, in turning over an old copy of THE LANCET, to read your letter of May 16th, 1886, and I thought if you had not had a correspondent from this country you might care to know that the treatment of placing a patient in the skin of a recently slaughtered animal is in considerable repute here. A patient of my own, suffering from meningitis, at the earnest request of a native servant, and in my absence, had a rabbit killed and then ripped open, and put on his shaved head as a cap. Here it was to remain for twenty-four hours. You can imagine better than I can describe what the odour was like at the expiration of that time. But if report goes for anything, the use of the sheepskin to envelope the whole body is often very successful.

"Pardon me for mentioning what may have passed entirely from your mind, and Believe me, faithfully yours,
"W. Curran, Esq." "T. GILLARD CHURCHER, M.B. Edin.

House Surgeon.—Our correspondent, in his efforts to improve the working of the institution, has certainly been placed in an unenviable position. We do not think that the medical staff should hold aloof, in matters of which they are the most competent judges; and before expressing any decided opinion we should like to know whether the house committee contains among it any members of the medical staff.

Mr. F. A. O'Rielly is quite right. Medical missionaries have no claim to interfere with private practice and the patients of medical men. To do so would bring discredit on the mission, which is not supposed to pauperise.

JABORANDI IN INTERMITTENT AND REMITTENT FEVER.

To the Editors of THE LANCET.

SIRS,—I should be very glad if any of your readers who have used jaborandi in the treatment of intermittent and remittent fevers would kindly give their experiences of its effects in reducing the duration of the "cold stage." I am, Sirs, faithfully yours,
December 5th, 1888. L.R.C.P.

ERRATUM.—An important typographical error occurred in our article last week on the Health of Trinidad, in the last line of which, p. 1130, the name of the Surgeon-General should have been printed Leonard Crane, not "Currie."

HOME FOR EPILEPTICS.

H. S. asks for information as to a suitable home for a girl, aged thirteen, who is subject to epileptic fits. A similar request was published in our last issue.

Mr. Rodwell (Norwich) is thanked. We can deal only with cases authenticated by the medical attendant.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir Dyce Duckworth, London; Mr. Annandale, Edinburgh; Sir Wm. Stokes, Dublin; Sir Henry Pitman, London; Dr. Gowers, London; Dr. Forbes Winslow, London; Mr. Boynton-Lee, Sheffield; Messrs. Everest and Co., London; Countess of Aberdeen; Dr. Oliver; Mr. Jonathan Hutchinson, London; Mr. Malcolm Morris, London; Dr. Hadden; Dr. Auld, Glasgow; Dr. Churcher, Tangier; Mr. Sumpter, King's Lynn; Mr. Rodwell, Norwich; Mr. Patterson, London; Mr. Lawson Tait, Birmingham; Mr. Macdonogh, Twickenham; Mr. Christopher Heath, London; Mr. J. J. Day, London; Messrs. Woodhouse and Rawson, London; Dr. E. St. G. Queely, Maytown, Qu.; Mr. Arthur Arnold, Nagasaki; Mr. W. H. Bennett, London; Messrs. Street and Co., London; Mr. F. B. Humphreys, London; Mr. Lane, Manchester; Dr. J. F. Haines, London; Dr. Bell Taylor, Nottingham; Mr. Haslam, Birmingham; Mr. J. Collier, Manchester; Mr. T. F. Chavasse, Birmingham; Dr. B. Walker, Spondon; Mr. McMunn, Hornsey; Dr. Du Bois, California; Mr. C. Truax, Chicago; Messrs. Burroughs and Wellcome, London; Mr. Torrance, Newcastle-on-Tyne; Mr. Muirhead Little, London; Dr. Murrell, London; Dr. Delefosse, Paris; Mr. W. Tallack, London; Dr. H. R. Bigelow, Paris; Mr. F. A. O'Rielly, Oldham; Dr. J. B. Ball, London; Dr. Kennedy, Peterborough; Dr. J. Anderson, London; Mr. J. D. Campbell, London; Dr. Gwynne, Sheffield; Dr. B. Howard, London; Mr. Defries, London; Dr. J. F. W. Silk, London; Dr. C. S. Watson, London; Dr. A. Fox, London; Dr. J. Craig, Llandudno; Mr. Stock, Darlington; Mr. Ashworth, Halstead; Dr. Croucher, Eastbourne; Mr. Coghill, Birmingham; Mrs. Blumer, Sunderland; Mr. Hardwall, Cornwall; Mr. Buck; Messrs. Anderson and Co., London; Mr. R. C. Priestley, London; Mr. Brown, Monmouth; Mr. Macnab; Dr. W. Squire; Mr. C. R. Briggs, London; Mr. Kimpton, London; J. S.; L.R.C.P.; Inquirer; Merchant Banking Co., London; Arthur, London; Tipo, London; R., London; A Doctor of Medicine; H. A.; J. S. B.; A Surgeon; H. S., M.D.; G. T. S.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Hillyer, Hants; Mr. Watt, London; Mr. Moring, London; Messrs. Wood and Co., New York; Mr. Hunt, Bembridge; Rev. C. G. Leger, Hereford; Mr. Tonks, Willenhall; Mr. Bowen, Scotland; Mr. Plummer, Wilts; Mr. Chate, Hyères; Mr. Mason, Sheffield; Mr. Morris, Swansea; Dr. Woakes, London; Mr. Blyth, London; Dr. Fraenkel, South Africa; Dr. Crossman, Bristol; Mr. McLeod, Ross-shire; Messrs. Battle and Co., Paris; Dr. Richardson, Halifax; Mr. Matthews, Cleator Moor; Mr. Youle, London; Mr. Boehm, London; Messrs. Reynolds and Branson, Leeds; Dr. Thomson, Dalkeith; Miss Willett, Great Badworth; Dr. Taylor, Birmingham; Mr. Sutcliff; Messrs. Roberts and Jones; Dr. Bramwell, Goole; Mr. Heywood; More Light, London; School of Massage; Newcastle-on-Tyne; Tutor, Newcastle; North Shields and Tynemouth Dispensary; Matron, Windsor; Kent County Asylum, Maidstone; M.B., Birmingham; M.D., London; University of Glasgow; E., Wilts; Emergency, London; G. D., London; C. C., London; M. N. B., London; Nemo, London; Medicus, Preston; X., London; Alpha, London; Tongariro, London; F. G.; Hyatt, Monmouth; Surgeon, London; Assistant, Liverpool; Medicus, Cornwall; Experientia, London; Medicus, Folkestone; Volens, London; Cuticle, London; Paletudo, London; Miss L., London; Bonâ Fide, Torquay.

Edinburgh Evening Dispatch, Surrey Advertiser, The Queen Christmas Number, Worcester Evening Gazette (Mass.), Herald and Weekly Free Press, Bath Daily Chronicle, Reading Mercury, Hertfordshire Mercury, Blackpool and Fleetwood Gazette, &c., have been received.

Medical Diary for the ensuing Week.

Monday, December 17.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations daily at 10 A.M.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesday, 2.30 P.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and each day in the week at the same hour.

SOCIETY OF ARTS.—8 P.M. Capt. W. de W. Abney: Light and Colour. (Cantor Lecture.)

MEDICAL SOCIETY OF LONDON.—8.30 P.M. Clinical Night. Dr. J. Hughlings Jackson: Case of Paralysis of Lower Part of Trapezius.—Dr. Seymour Taylor: Injury of Brachial Plexus.—The President (Sir William Mac Cormac): Case of Osteoplastic Resection of Foot.—Mr. John H. Morgan: Peculiar Deformity of Upper Extremity.—Dr. Angel Money: Cases of Neuro-muscular Irritability in Children. Dr. Fowler: Cirsoid Aneurysm.—Mr. Bernard Pitts: Slow-growing Tremors of Upper Jaw.—Dr. Acland: Acne Variolaforme.

Tuesday, December 18.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2 P.M.; Saturday, 2 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 2.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M. Throat Department, Tuesdays and Fridays, 1.30 P.M.

PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Hutchinson: Skeleton of a Short-limbed Dwarf. Adjourned Debate on the Pathology of Chronic Alcoholism. Drs. Dickinson, Buzzard, Savage, Sharkey, Finlay, Ormerod, Hadden, Pearson, and others, will take part in the discussion, or show illustrative specimens.

Wednesday, December 19.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday same hour. Ophthalmic Operations, Tuesday and Thursday, 1.30 P.M. Surgical Consultations, Thursday, 1.30 P.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; Friday, 2 P.M. Saturday, 1 P.M.

CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9.30 A.M.; Surgical visits on Wednesday and Saturday at 9.15 A.M.

SOCIETY OF ARTS.—8 P.M. Mr. W. J. Dibdin: Standards of Light.

Thursday, December 20.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Surgical Consultations, Wednesday, 1.30 P.M. Ophthalmic Operations, Friday, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

THE SANITARY INSTITUTE (Parkes Museum, 74A, Margaret-st., W.).—5 P.M. Mr. Ernest Hart: The New Local Government Bill and the County Councils, especially in relation to Sanitary Administration.

NEUROLOGICAL SOCIETY OF LONDON (National Hospital for the Paralysed and Epileptic, Queen-square).—8.30 P.M. Discussion on Cerebral Localisation in its Practical Relations, to be introduced by Dr. David Ferrier.

Friday, December 21.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, December 22.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

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